

2013 ACT 270 GRANDFATHERED ORDINANCES

2013 Wisconsin Act 270 establishes a uniform commercial building code in Wisconsin, while allowing municipalities to grandfather fire detection, prevention, and suppression ordinances that relate to the construction, alteration, or addition to a public building or building that is a place of employment. An ordinance that is grandfathered has passed the requirements laid out by the Legislature in Wisconsin Statute §101.02(7r)(b). The grandfathered ordinances are listed below. The grandfathered ordinances do not apply to multi-family dwellings as defined in Wis. Stat. § 101.971(2).

The Wisconsin Uniform Commercial Building Code went into effect on 04/18/2014. The grandfathered ordinances will be in effect as of the date of posting on this website (01/26/2015). No municipal commercial building ordinances that were pending grandfathering review by DSPS between 04/18/2014 and 01/26/2015 were in effect during that time period. Any commercial buildings permitted during that time period are only required to comply with the Wisconsin Uniform Commercial Building Code.

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Allouez

29.03 CODE ADOPTIONS

The following are adopted by reference and made a part hereof, as if fully set forth herein.

A. The International Fire Code ©, 2009 edition and reference codes and standards, published by the International Code Council, , 500 New Jersey Avenue, NW, 6th Floor, Washington, DC 20001 is adopted as an alternate to NFPA 1 except as amended by this chapter. Where a specific provision of NFPA 1 2009 is more restrictive than the IFC then the most restrictive will apply.

D. In Case of a conflict between any provisions of this Chapter, The Wisconsin Administrative Code, or the International Fire Code, the code containing the strictest provisions shall apply.

29.12 AMENDMENTS AND MODIFICATIONS

O. Automatic Sprinkler Systems. IFC Section 903.3.7 is added. Multiple fire department connections. Where multiple fire department connections are provided for sprinkler or standpipe systems on the same structure all such systems shall be interconnected in accordance with NFPA 14.

P. Fire Alarm and Detection Systems. Exceptions from IFC Sections 907.2.1, 907.2.2, 907.2.3 (2.), 907.2.4, 907.2.7, 907.4.1 eliminating the need for manual pull stations are deleted.

Appleton

Sec. 6-20. FIRE ALARMS.

(a) Every public building, dwelling or place of employment containing either a manual, sprinkler activated or fire detector activated alarm system shall comply with this section.

(b) New or upgraded fire alarm systems at large buildings or buildings with multiple occupancies shall provide outside strobe lights indicating the occupancy or area of fire alarm activation and if applicable, the location of the Fire Department connection. The location of these strobe lights is to be determined by the Fire Chief or designee.

Sec. 6-57. AUTOMATIC SPRINKLER SYSTEMS.

(c) *Buildings and areas where required.* Every building constructed or structurally altered shall have an approved automatic sprinkler system installed and maintained when occupied in whole or part for the following purposes:

(4) Multifamily dwellings of three (3) units or more exceeding four thousand eight hundred (4,800) square feet per floor and dormitories, except housing for the elderly, shall be protected by one (1) of the following automatic sprinkler systems:

b. Option #2 shall include the protection of all areas within the building by an automatic fire sprinkler system complying with Standard 13 of the National Fire Protection Association and equipped with residential type sprinkler heads in the living units.

(6) Educational Group E occupancies:

a. In basements, kitchens, shops and other spaces where combustibles are stored or handled.

b. In other than fire resistive buildings.

1. Ten thousand (10,000) square feet or over.
2. Two (2) stories and up exceeding six thousand (6,000) square feet in area.
3. Three (3) stories and up in height.

(d) *Application to existing buildings.* Where the Fire Chief finds that by reason of construction or highly combustible occupancy, existing buildings constitute a severe fire hazard to its occupants or to adjoining property, the provisions of this section will apply.

(e) *System types and approval of plans.* Approved automatic sprinkler equipment shall be installed, connected to an adequate water supply with sprinkler heads, valves and auxiliary equipment of standard types suitable for the individual building to be protected as determined by adopted Standard 13, of the National Fire Prevention Association. Automatic sprinkler systems shall be designed with a minimum five (5) psi water supply safety factor.

(i) *Water.* Where an automatic sprinkler system is required, the supply shall be from the city water supply.

Sec. 6-62. SMOKE DETECTORS.

(c) *Location and installation of smoke detectors.*

(1) Each dwelling unit shall be provided with a minimum of one (1) approved detector installed in a manner and location consistent with its listing. The Fire Department Fire Prevention Division can be contacted for recommendations when an owner is concerned about the installation and number of detectors.

(2) All existing dwelling units must meet the requirement of the State of Wisconsin Uniform Dwelling Code, Wisconsin Administrative Code, SPS 321.09 and 328.01 Smoke Detectors. Each dwelling unit shall be provided with a minimum of one (1) approved, listed and labeled smoke detector sensing visible or invisible particles of combustion, installed in a manner and location consistent with its listing.

(d) *Approval.* A smoke or heat detector required under this section shall be approved by Underwriter's Laboratories, Factory Mutual or any other comparable testing firm.

Ashwaubenon

Sec. 13-75. - ADOPTED.

The most current edition and any subsequent editions of the following are adopted by reference and made a part hereof, as if fully set forth herein:

(1) The International Fire Code, 2006 edition, and reference codes and standards, published by the International Fire Code Council, 2202 Leesburg Pike, Suite 708, Falls Church, Virginia 22041 -3401, except as amended by this chapter.

(2) NFPA 1 and 101, 2006 edition, as published by the National Fire Protection Association, 1 Batterymarch Park, P.O. Box 9101, Quincy, Massachusetts, 02269-9101

(3) The following Wisconsin Administrative Code chapters:

Wis. Admin. Code ch. Comm 4 Signs for Smoking Areas
Wis. Admin. Code ch. Comm 5 Credentials
Wis. Admin. Code ch. Comm 7 Explosive Materials
Wis. Admin. Code ch. Comm 9 Manufacture of Fireworks
Wis. Admin. Code ch. Comm 10 Flammable and Combustible Liquids
Wis. Admin. Code ch. Comm 14 Fire Prevention, except subch. III, which is deleted
Wis. Admin. Code ch. Comm 15 Cleaning and Dyeing
Wis. Admin. Code ch. Comm 16 Electrical
Wis. Admin. Code ch. Comm 18 Elevators
Wis. Admin. Code chs. Comm 20-25 Uniform Dwelling Code
Wis. Admin. Code ch. Comm 28 Smoke Detectors
Wis. Admin. Code ch. Comm 32 Safety And Health Standard For Public Employees
Wis. Admin. Code ch. Comm 40 Gas Systems
Wis. Admin. Code ch. Comm 43 Anhydrous Ammonia
Wis. Admin. Code chs. Comm 50-64 Building and Heating, Ventilation and Air Conditioning (built prior to July 1, 2002)
Wis. Admin. Code chs. Comm 61- 65 Wisconsin Commercial Building (built on or after July 1, 2002)
Wis. Admin. Code ch. Comm 66 Uniform Multifamily Dwellings (built prior to July 1, 2002)
Wis. Admin. Code ch. Comm 69 Barrier-Free Design
Wis. Admin. Code ch. Comm 70 Historic Buildings
Wis. Admin. Code ch. Comm 73 Illumination
Wis. Admin. Code chs. Comm 75- 79 Existing Buildings
Wis. Admin. Code chs. Comm 81- 87 Plumbing

(4) In case of a conflict between any provisions of this chapter, this Code, the Wisconsin Administrative Code, or the International Fire Code, the code containing the strictest provisions shall apply.

Sec. 13-78. - AMENDMENTS AND MODIFICATIONS.

The following amendments to the International Fire Code adopted in section 13-75 are hereby adopted and incorporated by reference in such fire code:

(27) Section 903.3.7 is added. Multiple fire department connections. Where multiple fire department connections are provided for sprinkler or standpipe systems on the same structure, all such systems shall be interconnected in accordance with NFPA 14.

(31) Exceptions from sections 907.2.1, 907.2.2, 907.2.3(2.), 907.2.4, 907.2.7, 907.4.1 eliminating the need for manual pull stations are deleted.

Bayside

Sec. 42-31 . ADOPTED.

(b) New commercial structures shall have a plan review by the fire department and police department to insure compliance with the village's fire prevention code. Construction on any items requiring fire department approval shall not commence until written approval is received.

(b) *NFPA standards.* The most current edition of the National Fire Protection Association standards are hereby adopted by reference and made part of the Village Fire Prevention Code with the same force and effect as though set forth herein in full .

Sec. 42-45. COMMERCIAL FIRE ALARM CONNECTIONS.

(a) All commercial structures required to install and maintain automatic fire alarm systems shall cause such systems to be monitored remotely by connection to an approved monitoring service or by connection to the police department's receiving panel as specified in article II of chapter 34.

(b) The village board, after fire department approval, may allow a commercial business, during normal business hours, to be notified of an alarm prior to notification of the fire department for the purpose of reducing false/nuisance alarms. The fire department shall be responsible for outlining an acceptable procedure prior to implementation. The village board or fire department may withdraw their approval at anytime with 30 days notice to the business owner or building occupant.

Sec. 42-46. AUTOMATIC SPRINKLER SYSTEMS.

(c) *Where installed.* Every building shall have an approved automatic sprinkler system installed and maintained when occupied in whole or in part for the following purpose:

- (1) Throughout all buildings used for the manufacture, storage or sale of combustible goods or merchandise.
- (2) Throughout all garages used for commercial purposes or garages serving multifamily buildings.
- (3) Hospitals, nursing, convalescent, old age, and other institutional buildings, offices, hotels, motels, and restaurants, throughout the entire building.
- (4) Community based residential facilities, throughout the entire building.
- (5) Multifamily buildings, throughout the entire building.
- (6) Schools, colleges, and universities, throughout the entire building.
- (7) Theaters, assembly and recreational buildings, throughout the entire building.
- (8) Rooming houses, townhouses, and two-family residences, throughout the entire building.

(e) *New additions, remodeling and/or change of use of existing buildings.*

- (2) If the use of any existing building is changed, the building shall comply with this article.
- (3) The fire department may approve the equivalent of a sprinkler system in a building where such system is impossible or impracticable to install. The equivalent shall depend on the type of occupancies and the type of structure. Smoke detectors and/or other fire protection devices may be required.

(g) *Fire extinguishers.* Approved fire extinguishers shall be installed in accordance with current editions of NFPA fire protection codes, or other standards that substantially meet or exceed NFPA standards as approved by the fire chief or his/her designee .

(j) *Type of system and approval of plans.*

(1) Approved automatic sprinkler equipment shall be installed and connected to an adequate water supply with sprinkler heads, valves and auxiliary equipment of standard types suitable for the individual building to be protected as determined by standard 13, 13R and 13D of the National Fire Protection Association in effect at date of installation.

(2) Automatic sprinkler systems when required in buildings and structures shall be designed and constructed in conformity with standard practice Only materials and devices approved by the fire department shall be used. "Standard practice" shall mean equipment conforming to standards of the National Fire Protection Association for sprinkler equipment or conforming to other recognized standards. "Standard practice" refers to approved material and devices currently listed by the Underwriters' Laboratories.

(3) Water supplied for an automatic sprinkler system shall be from a pressurized water main or from a pressure tank. Where the fire department determines the water supply is inadequate, in either pressure or volume, water supplied from a tank of not less than 5,000 gallons' capacity shall be provided.

(4) Every basement sprinkler system shall also include sprinkler protection in all shafts and stairwells (except elevator shaft) leading to the story above.

(5) Every sprinkler system shall have an alarm to monitor the flow switch in the system, an audible alarm and a siamese connection marked "To Automatic Sprinklers," approved by the fire department.

(k) *Exemption and substitution of other fire protection equipment.* Nothing contained in this section shall be construed as to require the installation of sprinklers in safe deposit or other vaults or in rooms or buildings devoted to the manufacture or storage of aluminum powder, calcium carbide phosphide, metallic and potassium. quicklime, magnesium powder, sodium peroxide or like materials where the application of water may cause or increase combustion nor in any other location where installation of sprinklers may increase the hazard; nor shall it be construed in any way to prohibit the substitution of other automatic protective equipment when approved by the fire department.

(m) *Application to existing buildings.* The provisions of this section will apply whenever the fire department finds that by reason of its construction, use or occupancy an existing building constitutes a severe fire hazard to its occupants or to adjoining property.

Beaver Dam

Sec. 30-1

(4) *State and federal codes adopted.* In addition to the regulations standards and procedures hereinafter set forth, compliance shall be made with the provisions of the DSPS and the most current state adopted edition of the NFPA (NFPA Chapters: NFPA 1, NFPA 101, SPS 314, and International Building Code, (IBC)) as it relates to fire prevention.

Sec. 30-9

Regulation for fire department connections (FDC) fire sprinklers, automatic fire suppression systems, and standpipes (NFPA 24, 13, 14, 15, 16, 13R and NFPA 1(13)).

(1) Where a FDC for each standpipe, automatic fire suppression system, or fire sprinkler system is in place, there shall be a fire hydrant within a distance determined by the AHJ.

(2) Fire department connections shall be located not less than 18 inches or more than 48 inches above the level of the adjoining ground, sidewalk, or grade surface.

(3) Time of compliance of new and existing establishments. All new establishments subject to this section shall comply therewith before a permit of occupancy is granted by the building inspector and fire chief or designee. All existing establishments built prior to January 1, 2005, are exempt, except that any new additions to previously exempted buildings must comply with current codes.

(4) FDC shall be five-inch Storz connection.

Brookfield, City of

8.08.030 ADOPTION OF FIRE PROTECTION REGULATIONS.

The following regulations are adopted by reference and incorporated into this chapter as if fully set forth herein and any violation of these provisions constitute a violation of this chapter:

A. The codes of the National Fire Protection Association (NFPA) as they are from time to time updated and amended;

B. The codes and statutes of the state of Wisconsin and the Wisconsin Department of Safety and Professional Services as they relate to fire prevention, investigation, and life safety, including but not limited to the Fire Prevention Code and the Building and Heating, Ventilation, and Air Conditioning Code, as they are amended and updated from time to time.

8.08.050 INSTALLATION OF AUTOMATIC SPRINKLER SYSTEMS.

Approved automatic fire suppression systems shall be installed per NFPA 13, 13D and 13R, and maintained per NFPA 25 in all newly constructed buildings, including but not limited to commercial, office, industrial, governmental, garages, theaters, restaurants, multifamily, schools and educational facilities, and places of assembly as follows:

A. Where required by the Wisconsin Building Code;

B. Buildings for the manufacture, storage and/or sale of goods or merchandise and office buildings that are greater than six thousand (6,000) square feet in area;

C. Theaters, restaurants, and places of assembly and shall utilize quick response sprinkler heads;

D. Hospitals, medical centers, nursing homes, convalescent centers, elderly retirement complexes and day care centers and shall utilize quick response heads. All existing health care facilities and community based residential facilities, including housing for the elderly (persons over sixty-two (62) years of age) or any place that houses nine or more unrelated people who are elderly, as herein defined, or who are

physically or mentally challenged shall comply with this code per Ordinance 1364 adopted March 19, 1991;

E. Dormitories, fraternity and/or sorority houses and shall utilize quick response heads;

G. All properties containing hazardous materials as defined in NFPA 1, Fire Code;

8.08.060 SMOKE DETECTION REQUIRED.

All buildings enumerated in Section 8.08.050 shall be required to install an approved fire and smoke detection system when the building area is less than the area required for the installation of an automatic sprinkler system.

8.08.070 AREAS NOT SERVED BY A MUNICIPAL WATER SYSTEM.

A. Until such time as a municipal water system is available to serve a building in which installation of an automatic suppression system is required, connection of the system to the domestic water supply shall be required. However, all design characteristics of systems installed under this section shall include provisions for eventual connection to a municipal water supply. In addition, such interim installations shall also include:

1. One or more fire department connections with two female couplings with National Standard Threads or one five-inch Storz connection, as approved by the fire chief, attached to a header of adequate size in accordance with fire protection engineering standards;
2. An approved automatic fire detection and alarm system monitored by an Underwriters Laboratory (UL), or equal, listed monitoring station and which complies with applicable NFPA 1, Fire Code requirements.

B. All fire suppression systems installed under the requirements of this chapter shall be connected to the municipal water system within twelve (12) months after municipal water is available.

8.08.080 EXISTING BUILDINGS.

A. All existing buildings which would be required to be sprinkled with occupant notification under Section 8.08.050 had they been newly constructed shall conform to this chapter when one of the following conditions are present:

1. An alteration with an accumulative total square footage equal to or greater than fifty (50) percent of the interior area or an addition with an accumulative total square footage equal to or greater than twenty-five (25) percent of the building. Alteration and addition are defined by the city of Brookfield Municipal Code Section 15.04.040 or any modifications, amendments, or recreations thereof. All building permits issued after December 2, 1986 shall be applied to the accumulative area calculation pursuant to Ordinance 1163.
2. When the use of a building or structure is changed as defined by the Wisconsin Commercial Building Code.
3. Repealed.

4. All buildings subject to fire suppression installation requirements under subsections (A)(1) or (2) of this section will have twelve (12) months from issuance of permit for alteration, addition, or change of use to meet the requirements.

B. All buildings enumerated in this chapter shall be required to install an approved fire and smoke detection system with occupant notification when the building area is less than the area required for the installation of an automatic sprinkler system.

C. The city fire appeals board may approve installation of the equivalent of a sprinkler system in a building where such system is impossible or a practical difficulty exists precluding installation of a sprinkler system. The fire appeals board shall consider the type of occupancy and use in its decision.

8.08.090 EXHAUSTS HOODS.

As defined by SPS 64 and the Wisconsin Building Code shall have an approved suppression system. The suppression system shall be interconnected with the required alarm system as an individual zone.

8.08.100 SPRAY BOOTHS.

All spray booths greater than ten square feet in area shall have an approved suppression system per NFPA 33. The suppression system shall be interconnected with the required alarm system as an individual zone.

8.08.110 ALARM SYSTEMS.

All sprinkler, suppression and detection systems shall be connected to an approved fire alarm system.

A. Fire alarm systems shall be designed and installed in accordance with NFPA 72.

B. The alarm system shall be monitored by an Underwriters Laboratory (UL), or equal, listed monitoring station.

C. The alarm/indicator panel shall be located in the main entry foyer or airlock of the building. All functions for reset and area identification shall be performed at this panel.

D. Each fire suppression zone shall be provided with an individual alarm zone and individual identification.

E. The alarm system shall be audible in all areas of the building and comply with the requirements of 28 CFR Part CFR Appendix A.

8.08.120 FIRE DEPARTMENT STANDPIPES/RISERS.

A. The installation of a fire suppression system will not supersede the requirements for the installation of fire department standpipes.

C. Standpipe connections shall have a two and one-half inch to one and one-half inch reducer cap.

Brookfield, Town of

5.21 LIFE SAFETY AND FIRE PROTECTION SYSTEMS.

(2) DESIGN. The design and installation of life safety and fire suppression and alarm systems shall comply with the National Fire Protection Code (NFPA), Wisconsin statutes and Administrative Code), and Town Fire Protection and Life Safety Code.

(3) WHERE REQUIRED.

6. Buildings used as COMM 59 occupancies:

- d. Storage or repair garages containing spaces more than three (3) passenger vehicles above or below other occupancies.
- e. All garages attached to or part of a passenger terminal.
- f. Every building which because of its construction or highly combustible occupancy involves a severe life hazard to its occupants, adjoining property, or constitutes a fire menace in the judgment of the Fire Chief.
- g. All buildings where the height exceeds one story require standpipes.

(3) INSTALLATION REQUIREMENTS.

- (a) FIRE DEPARTMENT CONNECTION REQUIRED. Except for one and two family dwellings, any sprinkler system installed in the Town shall be provided with at least a single inlet, 2 1/2-inch fire department connection (FDC). Any FDC shall be designed, installed, and located in compliance with COMM 51.24 and NFPA 13, or 13R as appropriate.
- (b) MONITORING REQUIRED. Any sprinkler system installed in the Town shall be monitored by an approved central station facility for the flow of water within the system. Any dry sprinkler system installed in the Town shall be further monitored for low air pressure within the system.
- (c) RETROACTIVITY. Any sprinkler system installed before the enactment of this ordinance and which is not monitored by an approved central station facility shall have one year to have such service installed and operational.

(2) EXISTING BUILDINGS.

- (b) EXPANSION OR REMODELING. When a building is expanded or remodeled so that more than 25% of the gross interior area of the original building is remodeled or added to and the created building is of a size, type, or use, which if the building were to be constructed new, the entire building shall be subject to the requirements of this code.
- (c) In determining the forgoing percentage, successive additions, expansions, or remodeling if made within a period of 20 years shall be aggregated and treated as a single expansion or addition. The 20-year aggregating period of this section shall not be limited by the date of adoption of this section.

(d) Regardless of the percentage of a building remodeling or expansion, if the addition, expansion or remodeled area is of a size or type or for a use which is subject to the provisions of this chapter, the addition, expansion or remodeled area must conform to the requirements of this chapter.

5.25 FIRE DEPARTMENT STANDPIPES/RISERS.

(1) The installation of a sprinkler system shall not supersede the requirements for the installation of Fire Department standpipes.

(b) Standpipe systems shall be designed and installed in accordance with NFPA 14 "Standard for the Installation of Standpipe and Hose Systems", the most current Edition.

5.26 FIRE EXTINGUISHERS.

(1) LOCATION. Notwithstanding the provisions of COMM 51.22 and NFPA 10 fire extinguishers shall be located in the path of egress as close to an exit door as possible.

Brown Deer

Section 2 ADOPTION OF WISCONSIN AND NFPA CODES AND STANDARDS

All Orders, Rules and Regulations established and propagated by the Department of Safety and Professional Services, or its successor Administrative Agency, as are set forth in the Wisconsin Administrative Code as from time to time amended, are hereby adopted. The most current legislatively enacted versions of those documents are adopted and will be enforced.

NFPA 1 Fire Code® and NFPA 101 The Life Safety Code® are hereby adopted in their entirety as part of this Chapter and serve as the fire prevention and construction codes for the Village of Brown Deer. The most current available printed edition of the NFPA Codes and Standards are adopted and will be enforced. All codes and standards referenced in any of the code documents adopted herein shall be deemed adopted herein and are codified and have the strength of code.

**Note: In the event of a conflict between any of the provisions of this Code with State Codes and/or NFPA Codes and Standards and the more restrictive shall control and govern.

Section 12 AUTOMATIC SPRINKLER SYSTEM

(B) Where Installed:

Every building hereinafter constructed or structurally altered shall have an approved automatic sprinkler system installed and maintained when occupied in whole or in part for the following purposes:

1. Throughout all buildings used for the manufacture, storage or sale of combustible goods or merchandise.
2. Throughout all garages used for commercial purposes or a passenger or freight terminal.
3. Basements: Throughout the entire basement.
5. Hospitals, Nursing, Convalescent, Old Age, and Other Institutional Buildings, Offices, Hotels, Motels, Restaurants and Places of Detention: Throughout the entire building.

6. Theaters, Assembly and Recreational Buildings: Throughout the entire building.
7. Schools, Colleges and Universities: Throughout the entire building.
8. Especially Hazardous Occupancies (See the most current NFPA Hazard Categories for a complete list. A copy of which is on file with the North Shore Fire Department)

(a) Prior to issuance of any building permit or occupancy permit, the Building Inspector and the Fire Chief or his/her designee, shall jointly review the plans, processes and materials involved. When upon review, it is determined that highly combustible processes or occupancy conditions exist, it shall be required that an adequate and approved fire extinguishment system be installed in buildings and/or designated hazardous areas in buildings.

(b) Examples of occupancies considered highly combustible: Chemical Works, Explosive and Pyrotechnics Manufacturing, Linseed Oil Mills, Linoleum and Oil Cloth Manufacturing, Paint Shops, Phroxylin Manufacturing and Processing, Solvent Extract Extracting, Varnish Works, Combustible Dusts, Occupancies involving Processing, Mixing, Storage and Dispensing of Volatile Flammable Liquids, Commercial or Institutional Kitchen Hoods, Vents and Ducts.

(C) How Installed:

Approved fire extinguishing systems shall be installed in accordance with current editions of N.F.P.A. Standards (13, 13R, 13D) or other standards which substantially meet or exceed N.F.P.A. standards as approved by the North Shore Fire Department

(E) Exemption and Substitution of Other Fire Protection Equipment and Alarm Systems:

Nothing herein shall be construed as requiring the installation of sprinklers where the application of water may cause or increase fire or may increase the hazard. Nothing in this section shall be construed in any way to interfere with the substitution of other automatic protective equipment or substitutions approved by the North Shore Fire Department.

Section 13 AUTOMATIC ALARM AND DETECTION SYSTEM

(B) Where Installed:

Every building hereinafter constructed or structurally altered shall have an approved fire alarm system installed and maintained for the following purposes:

1. Alarm and detection equipment shall be as specified by the occupancy use group in the Building or Fire Code (most restrictive).
2. Notification shall be installed in all sprinkler or partially sprinkler protected buildings.
3. All alarm and detection systems shall be monitored by a listed 3rc1 party central station.

(C) How Installed:

Approved fire alarm and detection systems shall be installed in accordance with current editions of the N.F.P.A. Fire Alarm Code or other standards which substantially meet or exceed N.F.P.A. standards as approved by the North Shore Fire Department.

Burke

Sec. 3-2-2 ADOPTION OF CODES

(a) The following orders, rules, and regulations of the Department of Commerce, all of which are set forth in the Wisconsin Administrative Code as from time to time may be amended, updated and renumbered, are incorporated herein by reference and adopted as part of this Chapter 2.

- (1) Comm 5 - Licenses, Certifications, and Regulations
- (2) Comm 7 - Explosive Materials
- (3) Comm 10 - Flammable and Combustible Liquids
- (4) Comm 14 - Fire Prevention
- (5) Comm 16 - Electrical
- (6) Comm 28 - Smoke Detectors
- (7) Comm 30 - Fire Department Safety and Health
- (8) Comm 40 - Gas Systems
- (9) Comm 43 - Anhydrous Ammonia
- (10) Comm 61 to 65 - Wisconsin Commercial Building Code
- (11) Comm 66 - Existing Buildings
- (12) Comm 75 to 79 - Existing Buildings

(b) The following codes of the National Fire Protection Association (NFPA) as from time to time may be amended, updated, and renumbered, are hereby adopted by reference and made a part of this Chapter 2: NFPA 1 and NFPA's incorporated standards and codes as published in the National Fire Codes of the NFPA.

(c) The 2006 Edition of the International Fire Code (IFC), Appendix D, as from time to time may be amended, updated, and renumbered, *is* hereby adopted by reference and made a part of this Chapter 2. In case of a conflict between any provision of the Wisconsin Administrative Code, the NFP1 fire prevention code, and the International Fire Code, Appendix D, the strictest provision shall apply.

Burlington

155-3. SCOPE; SYSTEM SUBMITTAL REQUIREMENTS.

A. The provisions of this chapter shall apply to all public buildings and places of employment.

B. The following buildings and uses are not public buildings or places of employment and are not subject to the provisions of this chapter.

(1) One-and two-family dwellings except where specifically included, as provided in this section and this chapter.

(2) Buildings used exclusively for farming as described in § 102.04(3), Wis. Stats.

(3) Nothing contained in this chapter shall be construed as applying to the transportation of any article or thing shipped in conformity with the regulations prescribed by the Interstate Commerce Commission, or as applying to the military forces of the United States.

(4) Buildings used primarily to house livestock.

(5) Temporary buildings used for construction purposes only, not to exceed two stories in height and not used as living quarters.

(6) Buildings owned by the federal government

C. The provisions of this chapter shall apply equally to new structures, including additions, and to change of use, change of occupancy, change of occupants, renovations of, alterations of, remodeling of and/or modifications to existing structures and existing conditions, except that existing conditions not in strict compliance with the terms of this chapter shall be permitted to continue where the exceptions do not constitute a distinct hazard to life or adjoining property, as determined by the authority having jurisdiction (AHJ), or have been superseded by this chapter.

D. The provisions of this chapter apply equally to the property owner and/or occupant.

E. Sections 155-4, 155-IS. 155-16, 155-17, 155-18, 155-19, 155-20, 155-23, 155-26, 155-28E, F, and G, 155-29 and Articles III and IV of this chapter apply to all individuals and/or properties within the jurisdiction of the municipality.

F. If any conflicts exist between this chapter and any NFPA code and/or standard and/or state code, the most restrictive, as determined by the AHJ, shall be enforced by the AHJ.

G. Where the AHJ finds that an existing building, because of current occupancy, or a change in occupancy, constitutes a hazard to its occupants or adjoining property, the AHJ may order compliance with the provisions of this chapter. A hazard shall be determined by the existence of one or more of the following conditions:

(1) Any building which by reason of its construction or highly combustible occupancy and/or contents involves a hazard to its occupants or, in the judgment of the AHJ, constitutes a fire menace, e.g., paint shop and other occupancies involving processing, mixing, storing, and dispensing of volatile liquids or solids.

(2) Non-fire-resistive characteristics of a structure.

(3) Accumulation of flammable or combustible materials of any kind.

- (4) Lack of accessibility to the premises for fire-fighting equipment.
- (5) Substantial number of fire calls or complaints on the premises.
- (6) Traffic patterns for pedestrian ingress and egress which require protection under this section.
- (7) Insufficient ventilation system.
- (8) Lack of an internal communication system, or, due to the size or type of building making regular Fire Department radio communication inoperable, the building owner is required to install a repeater system or something comparable to assist radio communications.
- (9) Number, characteristics and movement of employees which require protection under this section.

H. Additions to, change of use, renovated, altered, remodeled or modified buildings.

- (1) The provisions of this chapter shall apply to all existing structures, public buildings and places of employment that are additions, changes of use, renovations of, alterations of, remodeling of and/or modifications to existing structures and existing conditions. Note: Section 155-3H(s) also applies.
- (5) All percentages of remodeling shall be cumulative as applied to Subsection H(1),(2),(3) and (4) above.
- (7) If any addition is made to an existing building and/or structure that currently has a fire sprinkler, fire suppression, fire control or fire alarm system installed, the addition shall comply completely with this chapter.
- (8) If any addition is made to an existing building and/or structure that currently has a fire sprinkler, fire suppression, fire control or fire alarm system installed, the addition shall have a fire sprinkler, fire suppression, fire control or fire alarm system installed.
- (9) If the use of and/or contents of any existing building is changed and becomes more hazardous as determined by the AHJ, the building shall be brought into compliance with this chapter.
- (10) Those portions, elements, systems or components of existing buildings and structures to be renovated, altered, remodeled or modified on or after the effective date of the rules under this chapter, and where the alteration, modification or the addition affects a building element or component relating to subject matters regulated by this chapter, shall be designed, constructed and maintained in accordance with the applicable rules of this chapter as the rules exist on one of the following:
 - (a) The date plans for the alteration or modification are conditionally approved by the AI-U.
 - (b) The date the local building permit is issued.
 - (c) The date the replacement is initiated, where § 155-3H(1o)(a) and (b) do not apply.
- (11) Any change in occupancy or change of use of any premises. Any owner, agent or occupant making a change in occupancy or use of any premises, or occupying a previously vacant space, excluding any private dwelling shall be required to obtain a safety inspection by the Fire Department prior to the new tenant taking occupancy of any building or structure that was

previously vacated or any change in occupancy or change of use of any existing building or structure or portion thereof.

(a) The owner, agent or occupant of a building shall schedule an appointment with the Fire Inspector for an inspection of the building and/or occupied space(s).

(b) Any violations of this chapter, including all applicable codes and/or standards adopted by reference, or other portion of the City of Burlington Municipal Code observed at the time of inspection shall be corrected prior to the new tenant taking occupancy or any change of use taking place.

155-12. ADOPTION OF WISCONSIN DEPARTMENT OF COMMERCE CODES.

A. The following Wisconsin Administrative Codes in effect on the date of adoption of this chapter, or as they may be amended or renumbered from time to time, are adopted by reference, enforced and incorporated into this chapter as if fully set forth herein:

Reference	Subject Matter
Comm 3	Petition for variance procedures
Comm 5	Licenses, certification and registration
Comm 7	Explosive materials
Comm 8	Mines, pits and quarries
Comm 9	Manufacture of fireworks
Comm 10	Flammable and combustible liquids
Comm 14	Fire prevention
Comm 16	Electrical
Comm 18	Elevator code
Comm 28	Smoke detectors
Comm 33	Passenger ropeways
Comm 34	Amusement rides and attractions
Comm 35	Infectious agents
Comm 40	Gas systems
Comm 41	Boilers and pressure vessels
Comm 43	Anhydrous ammonia
Comm 45	Mechanical refrigeration
Comm 48	Petroleum products
Comm 61-65	Wisconsin commercial building code
Comm 70	Historic buildings
Comm 71	Solar energy systems
Comm 75-79	Existing buildings
Comm 95-98	Manufactured homes

[1]: *Editor's Note: Comm 9 was repealed effective 3-1-2008. For current fireworks regulations, see Comm 7, Explosives and Fireworks.*

[2]: *Editor's Note: Ch. Comm 70 no longer appears in the Wisconsin Administrative Code. For current provisions regarding historic buildings, see Chs. Comm 75 through 79, Buildings Constructed Prior to 1914.*

[3]: *Editor's Note: Chs. Comm 75 through 79 no longer appear in the Wisconsin Administrative Code. For current provisions regarding existing buildings, see ch. Comm 66, Existing Buildings.*

[4]: *Editor's Note: Chs. Comm 95 through 98 no longer appear in the Wisconsin Administrative Code. For current provisions regarding manufactured homes, see ch. Comm 26, Manufactured Home Communities.*

B. Any violation of the incorporated provisions of any State of Wisconsin code, law, regulation, standard or any other requirements constitutes a violation of this chapter.

C. In cases of conflict between local and State of Wisconsin codes, the most restrictive provisions, as determined by the AHJ, shall govern.

155-13. ADOPTION OF INTERNATIONAL CODE COUNCIL CODE(S).

The latest International Code Council (ICC) publication(s) listed below and published on or before the effective date of this chapter are adopted by reference, enforced and incorporated into this chapter as if fully set forth herein:

A. International Fire Code (IFC), 2006 edition (applies only to sections specifically referenced in this chapter).

155-14. ADOPTION OF NATIONAL FIRE PROTECTION ASSOCIATION CODES AND PUBLICATIONS.

A. The latest National Fire Protection Association (NFPA) codes and publications published on or before the effective date of this chapter are adopted by reference, enforced and incorporated into this chapter as if fully set forth herein:

NFPA 1: Uniform Fire Code (applies only to use, maintenance, operation and testing), 2006 edition

NFPA 10: Standard for Portable Fire Extinguishers, 2007 edition

NFPA 11: Standard for Low-, Medium- and, High-Expansion Foam, 2005 edition

NFPA 12: Standard on Carbon Dioxide Extinguishing Systems, 2008 edition

NFPA 13: Standard for the Installation of Sprinkler Systems, 2007 edition

NFPA 13D: Standard for the installation of Sprinkler Systems in One and Two-Family Dwellings and Manufactured Homes, 2007 edition

NFPA 13R: Standard for the installation of Sprinkler Systems in Residential Occupancies up to and Including Four Stories in Height, 2007 edition

NFPA 14: Standard for the Installation of Standpipes and Hose Systems, 2007 edition

NFPA 15: Standard for Water Spray Fixed Systems for Fire Protection, 2007 edition

NFPA 16: Standard for the Installation of Foam-Water Sprinkler and Foam-Water Spray Systems, 2007 edition

NFPA 17: Standard for Dry Chemical Extinguishing Systems, 2002 edition

NFPA 17A: Standard for Wet Chemical Extinguishing Systems, 2002 edition

NFPA 20: Standard for the Installation of Stationary Pumps for Fire Protection, 2007 edition

NFPA 22: Standard for Water Tanks for Private Fire Protection, 2003 edition

NFPA 24: Standard for the Installation of Private Fire Service Mains and Their Appurtenances, 2007 edition

NFPA 25: Standard for the Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems, 2008 edition

NFPA 30: Flammable and Combustible Liquids Code, 2008 edition

NFPA 30A: Code for Motor Fuel Dispensing Facilities and Repair Garages, 2008 edition

NFPA 30B: Code for the Manufacture and Storage of Aerosol Products, 2007 edition

NFPA 33: Code for the Manufacture and Storage of Aerosol Products, 2007 edition

NFPA 34: Standard for Dipping and Coating Processes Using Flammable or Combustible Liquids, 2007 edition

NFPA 35: Standard for the Manufacture of Organic Coatings, 2005 edition

NFPA 36: Standard for Solvent Extraction Plants, 2004 edition

NFPA 37: Standard for the Installation and Use of Stationary Combustion Engines and Gas Turbines, 2006 edition

NFPA 40: Standard for the Storage and Handling of Cellulose Nitrate Film, 2007 edition

NFPA 42: Code for the Storage of Pyroxylin Plastic, 2002 edition

NFPA 45: Standard on Fire Protection for Laboratories Using Chemicals, 2004 edition

NFPA 51: Standard for the Design and Installation of Oxygen-Fuel Gas Systems for Welding, Cutting, and Allied Processes, 2007 edition

NFPA 51A: Standard for Acetylene Cylinder Charging Plants, 2006 edition

NFPA 51B: Standard for Fire Prevention During Welding, Cutting, and Other Hot Work, 2003 edition

NFPA 54: National Fuel Gas Code, 2006 edition

NFPA 55: Standard for the Storage, Use, and Handling of Compressed Gases and Cryogenic Fluids in Portable and Stationary Containers, Cylinders, and Tanks, 2005 edition

NFPA 58: Liquefied Petroleum Gas Code, 2008 edition

NFPA 59: Utility LP-Gas Plant Code, 2004 edition

NFPA 59A: Standard for the Production, Storage, and Handling of Liquefied Natural Gas (LNG), 2006 edition

NFPA 61: Standard for the Prevention of Fires and Dust Explosions in Agricultural and Food Processing Facilities, 2008 edition

NFPA 68: Standard on Explosion Protection by Deflagration Venting, 2007 edition

NFPA 69: Standard on Explosion Prevention Systems, 2008 edition

NFPA 70: National Electrical Code®, 2005 edition

NFPA 72: National Fire Alarm Code, 2007 edition

NFPA 75: Standard for the Protection of Information Technology Equipment, 2003 edition

NFPA 76: Standard for the Fire Protection of Telecommunications Facilities, 2005 edition

NFPA 80: Standard for Fire Doors and Other Opening Protectives, 2007 edition

NFPA 82: Standard on Incinerators and Waste and Linen Handling Systems and Equipment, 2004 edition

NFPA 85: Boiler and Combustion Systems Hazards Code, 2007 edition

NFPA 86: Standard for Ovens and Furnaces, 2007 edition

NFPA 88A: Standard for Parking Structures, 2007 edition

NFPA 88B: Standard for Repair Garages, 1997 Edition

NFPA 91: Standard for Exhaust Systems for Air Conveying of Vapors, Gases, Mists, and Noncombustible Particulate Solids, 2004 edition

NFPA 92A: Standard for Smoke-Control Systems Utilizing Barriers and Pressure Differences, 2006 edition

NFPA 92B: Standard for Smoke Management Systems in Malls, Atria, and Large Spaces, 2005 edition

NFPA 96: Standard for Ventilation Control and Fire Protection of Commercial Cooking Operations, 2008 edition

NFPA 99B: Standard for Hypobaric Facilities, 2005 edition

NFPA 99C: Standard on Gas and Vacuum Systems, 2005 edition

NFPA 101: Life Safety Code®, 2006 edition

NFPA 101B: Code for Means of Egress for Buildings and Structures

NFPA 102: Standard for Grandstands, Folding and Telescopic Seating, Tents, and Membrane Structures, 2006 edition

NFPA 105: Standard for the Installation of Smoke Door Assemblies and Other Opening Protectives, 2007 edition

NFPA 110: Standard for Emergency and Standby Power Systems, 2005 edition

NFPA 111: Standard on Stored Electrical Energy Emergency and Standby Power Systems, 2005 edition

NFPA 115: Standard for Laser Fire Protection, 2003 edition

NFPA 160: Standard for the Use of Flame Effects Before an Audience, 2006 edition

NFPA 170: Standard for Fire Safety and Emergency Symbols, 2006 edition

NFPA 204: Standards for Smoke and Heat Venting, 2007 edition

NFPA 214: Standard on Water-Cooling Towers, 2005 edition

NFPA 221: Standard for High Challenge Fire Walls, Fire Walls, and Fire Barrier Walls, 2006 edition

NFPA 230: Standard for Fire Protection of Storage, 2003 edition

NFPA 232: Standard for the Protection of Records, 2007 edition

NFPA 241: Standard for Safeguarding Construction, Alteration, and Demolition Operations, 2004 edition

NFPA 291: Practice for Fire Flow Testing and Marking of Hydrants, 2007 edition

NFPA 303: Fire Protection Standards for Marinas and Boatyards, 2006 edition

NFPA 318: Standard for the Protection of Semiconductor Fabrication Facilities, 2006 edition

NFPA 400: Hazardous Materials Code

NFPA 407: Standard for Aircraft Fuel Servicing, 2007 edition

NFPA 408: Standard for Aircraft Hand Portable Fire Extinguishers, 2004 edition

NFPA 409: Standard on Aircraft Hangars, 2004 edition

NFPA 410: Standard on Aircraft Maintenance, 2004 edition

NFPA 418: Standard for Heliports, 2006 edition

NFPA 430: Code for the Storage of Liquid and Solid Oxidizers, 2004 edition

NFPA 432: Code for the Storage of Organic Peroxide Formulations, 2002 edition

NFPA 434: Code for the Storage of Pesticides, 2002 edition

NFPA 484: Standard for Combustible Metals, 2006 edition

NFPA 490: Code for the Storage of Ammonium Nitrate, 2002 edition

NFPA 495: Explosive Materials Code, 2006 edition

NFPA 499: Recommended Practice for the Classification of Combustible Dusts and of Hazardous (Classified) Locations for Electrical Installations in Chemical Process Areas, 2004 edition

NFPA 560: Standard for the Storage, Handling, and Use of Ethylene Oxide for Sterilization and Fumigation, 2007 edition

NFPA 654: Standard for the Prevention of Fire and Dust Explosions from the Manufacturing, Processing, and Handling of Combustible Particulate Solids, 2006 edition

NFPA 655: Standard for Prevention of Sulfur Fires and Explosions, 2007 edition

NFPA 664: Standard for the Prevention of Fires and Explosions in Wood Processing and Woodworking Facilities, 2007 edition

NFPA 704: Standard System for the Identification of the Hazards of Materials for Emergency Response, 2007 edition

NFPA 720: Standard for the Installation of Carbon Monoxide (CO) Warning Equipment in Dwelling Units, 2005 edition

NFPA 750: Standard on Water Mist Fire Protection Systems, 2006 edition

NFPA 780: Standard for the Installation of Lightning Protection Systems, 2008 edition

NFPA 801: Standard for Fire Protection for Facilities Handling Radioactive Materials, 2003 edition

NFPA 804: Standard for Fire Protection for Advanced Light Water Reactor Electric Generating Plants, 2006 edition

NFPA 850: Recommended Practice for Fire Protection for Electric Generating Plants and High Voltage Direct Current Converter Stations, 2005 edition

NFPA 853: Standard for the Installation of Stationary Fuel Cell Power Systems, 2007 edition

NFPA 1123: Code for Fireworks Display, 2006 edition

NFPA 1124: Code for the Manufacture, Transportation, Storage and Retail Sales of Fireworks and Pyrotechnic Articles, 2006 edition

NFPA 1125: Code for the Manufacture of Model Rocket and High Power Rocket Motors, 2007 edition

NFPA 1126: Standard for the Use of Pyrotechnics before a Proximate Audience, 2006 edition

NFPA 2001: Standard on Clean Agent Fire Extinguishing Systems, 2008 edition

NFPA 2010: Standard for Fixed Aerosol Fire Extinguishing Systems, 2006 edition

155-17. VARIANCES.

C. The AHJ may require tests as proof of compliance with the intent of this chapter. Such tests are to be made by an approved agency at the expense of the person requesting approval of the alternate material or method of construction.

155-21. AUTOMATIC FIRE SPRINKLER, FIRE CONTROL AND/OR FIRE SUPPRESSION SYSTEM PROTECTION.

B. Code compliance. All automatic fire sprinkler, fire control and/or fire suppression systems installed, modified, altered and/or repaired shall comply with this chapter and all of the applicable NFPA codes and/or standards.

C. Code conflicts. If any conflicts exist between this chapter and any NFPA code and/or standard, the most restrictive, as determined by the AHJ, shall be enforced by the AHJ.

H. Installation required. Automatic fire sprinkler systems shall be installed in all structures where the floor area exceeds the thresholds established in Table 155-21H of the specific occupancy type and construction type involved. For the purpose of determining square footage as it relates to the required

installation of fire sprinklers in a building firewalls shall not be considered area dividers unless the firewall is rated at four hours without penetrations and extends a minimum of three feet above the roof.

Table 155-21H

Occupancy

Type	Type I	Type II	Type III	Type IV	Type V
E*	All	All	All	All	All
F-2	5,000 SF	5,000 SF	3,000 SF	3,000 SF	3,000 SF
I-2	All	All	All	All	All
I-3	All	All	All	All	All
I-4	All	All	All	All	All
R-4	All	All	All	All	All
U	5,000 SF	5,000 SF	3,000 SF	3,000 SF	3,000 SF

Note: *Excludes single-family home day cares.

I. Additional automatic fire sprinkler system Installations required. An automatic sprinkler system shall be installed:

- (1) In all parking structures above and below ground with ceilings.
- (2) In all CBRFs (community-based residential facilities).
- (3) In all adult family homes.
- (4) Throughout all dormitories, fraternities and sorority houses.
- (5) Throughout every building, new or existing, which by reason of its construction or combustible occupancy involves a life hazard to its occupants or in the judgment of the AHJ constitutes a fire menace.
- (6) Throughout all mini-warehouses and unattached multifamily parking garages that exceed any of the following:
 - (a) Three thousand square feet or more in area on any floor.
 - (b) Two stories in height.
 - (c) Any portion of the structure is below grade level.

J. Basements and garages are to be designed to protect as a minimum of for ordinary hazard occupancy.

K. When an automatic fire sprinkler system is required to be installed by this chapter but not the Wisconsin Department of Commerce, in a structure that is not currently serviced by a municipal water source, the following must be complied with:

- (1) Any required fire sprinkler system shall be installed In complete compliance with the appropriate NFPA code(s) and/or standard(s) .
 - (b) The fire sprinkler system(s) shall be installed and connected to a conditionally approved automatic water supply .

- (d) The required automatic water supply must be capable of delivering the required quantity of water at the required pressure as determined by hydraulically calculating the system demand in accordance with NFPA 13 for the most hydraulically demanding area.
- (3) Within 90 days after a municipal water system becomes available, the sprinkler system shall be connected to the municipal water supply.
- (4) For the purpose of this chapter, an available municipal water supply shall mean any of the following:
 - (a) A municipal water main located at or near the streets adjacent to the property on which the structure that is required to be sprinklered is located.
 - (b) A municipal water main located in a utility easement on or near the property on which the structure that is required to be sprinklered is located.
 - (c) A municipal water main located under, at or near the streets within 1,000 lineal feet of any part of the property on which the structure that is required to be sprinklered is located.
 - (d) A municipal water main located in a utility easement within 1,500 lineal feet of any part of the property on which the structure that is required to be sprinklered is located.

L. All automatic fire sprinkler, fire control and/or fire suppression systems shall comply with the following:

- (1) Be designed in accordance with the appropriate NFPA standards and/or codes.
- (3) Be designed to protect the highest hazard present at any time in the protected area
- (4) Be monitored by a UL-listed central station for fire service that is acceptable to the AHJ.
- (5) Have sprinkler control rooms located with adequate access for the Fire Department, sprinkler maintenance and inspection personnel and which shall not be located within private dwellings with the exception of NFPA 130 systems.
- (6) Have direct access from the exterior to the sprinkler control valve acceptable to the AHJ.
- (7) Have a bell (minimum ten-Inch) and strobe installed, located above the FDC.
- (8) The FDC must be located at least 40 feet from all gas meters, electrical meters and transformers.
- (9) The FDC must be installed in a location acceptable to the AHJ, and must be within 150 feet of a fire hydrant.
- (10) Be designed for the hazard being protected or as specifically specified in this chapter and/or as acceptable to the AHJ.
- (11) All automatic fire sprinkler systems hydraulic designs are to be based on a maximum of 90% of the available water supply (a minimum of a ten-percent safety margin shall be maintained).

N. Application to existing buildings.

(1) Adult family homes and CBRFs regardless of the number of occupants or class must be retrofitted with fire sprinkler protection acceptable to the AHJ.

(2) Where the AHJ finds that an existing building because of current occupancy or a change in occupancy constitutes a hazard to its occupants or adjoining property, the AHJ may order compliance with the provisions of this section. A hazard shall be determined by the existence of one or more of the following conditions:

(a) Any building which, by reason of its construction or highly combustible occupancy, involves a hazard to its occupants or, in the judgment of the AHJ, constitutes a fire menace, e.g., paint shop and other occupancies involving processing, mixing, storing, and dispensing of volatile liquids or solids.

(b) Non-fire-resistive characteristics of a structure.

(c) Accumulation of flammable or combustible materials.

(d) Lack of accessibility to the premises for fire-fighting equipment.

(e) Substantial number of fire calls or complaints on the premises.

(f) Traffic patterns for pedestrian ingress and egress which require protection under this section.

(g) Insufficient ventilation system.

(h) Lack of an internal communication system or, due to the size or type of building making regular Fire Department radio communication inoperable, the building owner is required to install a repeater system or something comparable to assist radio communications.

(i) Number, characteristics and movement of employees which require protection under this section.

(3) Installation of an automatic sprinkler system must be started within one year from the service of such orders and shall be completed within 180 days after construction has started.

O. Exemptions. At any location where the installation of sprinklers may cause or increase an occupational hazard as determined by any governmental authority having jurisdiction over such location or occupation, the AHJ may waive any requirement to install an automatic fire sprinkler system or any portion thereof.

P. Remote Fire Department connections.

(1) The AHJ is authorized to require a remote Fire Department connection (FDC) to be installed for any system and facility that the AHJ deems it necessary.

(2) All remote FDCs must be installed in a location that is acceptable to the AHJ.

(3) All remote FDCS must be installed In a manner that is acceptable to the AHJ.

(4) All remote FDCS, including all piping, must be tested hydrostatically and flushed in a manner that is acceptable to the AHJ.

155-22. STANDPIPES.

B. Where required. Fire Department standpipe systems shall be installed in the following structures:

- (1) Any structure required by the State of Wisconsin statutes or administrative codes.
- (2) In all new structures over two stories in height.
- (3) In any structure that exceeds 10,000 square feet in floor area.
- (4) In any structure where the AHJ deems standpipes are necessary for fire-fighting purposes.
- (5) Temporary standpipes must be installed in an approved location for all of the following structures:
 - (a) All combustible structures exceeding two stories in height.
 - (b) All noncombustible structures exceeding three stories in height.

C. Installation requirements. Fire Department standpipes shall be designed and installed in accordance with this section. Where any requirement in this section is more restrictive than any NFPA standard and/or code and/or state code, the requirements in this section must be complied with.

- (1) The installation of standpipes shall be in accordance with this section and NFPA 14.
- (2) The class and location of standpipes and Fire Department connections shall be acceptable to the AHJ.
- (3) All standpipe systems' hydraulic designs are to be based on a maximum of 90% of the available water supply (a minimum of a ten-percent safety margin shall be maintained).
- (6) The location of standpipe hose connections shall be accessible and shall be located so that all portions of the building are within 100 feet of hose attached to a hose valve. This distance must be measured using the normal aisles or the path a hose would be laid as determined by the AHJ.
- (7) The locations of all hose valves shall be acceptable to the AHJ.
- (8) The AHJ may require additional standpipes and/or hose valves to be installed.
- (10) When required by the AHJ, an approved standpipe shall be installed as construction progresses to make standpipes available for Fire Department use in the topmost floors constructed. Temporary standpipes shall be provided in place of permanent standpipes when required, during the period of construction on buildings required by this chapter.
- (11) The location of all Fire Department connections for standpipes shall be approved by the AHJ.
- (12) The Fire Department connections shall be located at least 40 feet from all electrical transformers, gas meters, or propane storage.
- (13) Temporary standpipes are required on buildings over two stories in height.
- (16) All manual wet and all automatic standpipes must have water flow switches and alarm test connections.

F. Remote Fire Department connections.

- (1) The AHJ is authorized to require a remote Fire Department connection (FDC) to be installed for any system and facility that the AHJ deems it necessary.

- (2) All remote FDCs must be installed in a location that is acceptable to the AHJ.
- (3) All remote FDCs must be installed in a manner that is acceptable to the AHJ.
- (4) All remote FDCs, including all piping, must be tested hydrostatically and flushed in a manner that is acceptable to the AHJ .

155-23. FIRE ALARM SYSTEMS.

B. Installation required. A fire alarm system shall be installed in all structures where the floor area exceeds the thresholds established in Table 155-238 of the specific occupancy type and construction type involved.

Table 155-23B

Occupancy

Type	Type 1	Type 2	Type 3	Type 4	Type 5
E	All	All	All	All	All
I-2	All	All	All	All	All
I-3	All	All	All	All	All
I-4	All	All	All	All	All
R-4	All	All	All	All	All
U	5,000 SF	5,000 SF	3,000 SF	3,000 SF	3,000 SF

Note: * Excludes single-family home day cares; state statutes apply.

C. Code compliance. All fire alarm systems installed, modified, altered and/or repaired shall comply with this chapter and all of the applicable NFPA codes and/or standards.

D. Code conflicts. If any conflicts exist between this chapter and any NFPA code and/or standard, the most restrictive, as determined by the AHJ, shall be enforced by the AHJ.

E. Minimum system requirements. The following minimum system requirements shall be met when any occupancy type exceeds the limits in § 155-238. Minimum system requirements shall include:

- (1) Audible notification appliances shall be installed throughout protected premises.
- (2) Visible notification appliances shall be installed throughout protected premises, except for the following:
 - (a) Closets and/or other similar small storage rooms that do not exceed 50 square feet in floor area and are not normally occupied.
 - (b) Normally unoccupied crawl spaces.
 - (c) Normally unoccupied attic spaces.
 - (d) Any nonaccessible area
 - (e) Any area in which the AHJ deems visible notification appliances are not required.
- (4) Manual initiating devices (pull stations) shall be located at all points of egress, including all exit doors on every floor and/or building level.

(5) Water flow detection devices shall be connected to the fire alarm system to specifically activate the notification appliances upon water flow.

(6) Fire suppression system activation alarms shall be connected to the protected premises fire alarm system to specifically activate the notification appliances upon system activation. This includes but is not limited to wet chemical, CO2 clean agent, water mist and dry chemical systems.

(7) Fire control and/or suppression systems supervisory condition indicators shall be connected to and monitored by the fire alarm system. This specifically includes, but is not limited to: valve supervisory switches (tamper switches), high air switches, low air switches, high water level switches, low water switches, low temperature switches, low water temperature switches, fire pump condition indicators and/or any other situation or condition deemed necessary by the AHJ.

(8) Fire alarm systems shall be addressable and capable of indicating the status of all specific components connected to the system.

(9) All fire alarm systems shall be monitored by a service acceptable to the AHJ.

(10) Fire alarm annunciators shall be installed in all protected premises. The number and locations of the fire alarm annunciators installed shall be acceptable to the AHJ.

(11) As determined by the AHJ, any additional notification and/or initiation appliances/devices may be required due to size, occupancy hazards, building construction, and/or occupancy use .

N. Special requirements. On all buildings over four stories in height, a fire command center for the Fire Department operations shall be provided. The fire command center shall comply with NFPA 72 and shall contain the features required in the International Fire Code and NFPA 72 and NFPA 101. Two-way telephone communication service shall be provided for Fire Department use. This system shall be in accordance with NFPA 72. The communications system shall operate between the central control station and every elevator car, every elevator lobby, and each floor level of exit stairs.

Q. Fire alarm control panels. Fire alarm control panels shall display the status of the system components and be installed in a location acceptable to the AHJ. Adequate access for Fire Department, alarm maintenance, and inspection personnel shall be maintained. Fire alarm control panels shall not be located within private dwellings with the exception of one- and two-family dwellings.

155-24. AUTOMATIC FIRE PROTECTION FOR COOKING AREAS.

B. Where required. Automatic fire-extinguishing systems shall be installed in any cooking area required by the State of Wisconsin codes and any area in which the AHJ has determined a potential fire risk exists.

155-35. FIRE SPRINKLER CONTROL VALVE ACCESS.

All structures that have automatic sprinkler systems:

A. Shall have sprinkler control rooms located with adequate access for Fire Department, sprinkler maintenance and inspection personnel.

B. Shall not be located within private dwellings with the exception of NFPA 130 systems.

C. Shall have direct access from the exterior to the sprinkler control valve(s) that is acceptable to the AHJ.

155-40. HIGH-PILED COMBUSTIBLE STORAGE.

A High-piled combustible storage must comply with Chapter 23 of the International Fire Code.

B. Definitions as found in Section 2302 of the International Fire Code will be used for high-piled combustible storage.

C. Commodities shall be classified in accordance with Section 2303 of the International Fire Code.

D. High-piled combustible storage areas shall be designated in accordance with Section 2304 of the International Fire Code.

E. Housekeeping and maintenance of high-piled combustible storage areas shall be in accordance with section 2305 of the International Fire Code.

F. General fire protection and life safety features shall be in accordance with Section 2306 of the International Fire Code, except that compliance with Section 2306.7 is not required by this chapter. (Note: Compliance with this section may be required by the State of Wisconsin.)

G. Solid piled and shelf storage shall be in accordance with Section 2307 of the International Fire Code.

H. Rack storage shall be in accordance with Section 2308 of the International Fire Code.

I. Automated storage shall be in accordance with Section 2309 of the International Fire Code.

J. Specialty storage shall be in accordance with Section 2310 of the International Fire Code.

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SEC. 5-2-2 ADOPTION OF STATE AND NATIONAL CODES.

(a) The following orders, rules, and regulations of the Department of Industry, Labor and Human Relations, all of which are set forth in the Wisconsin Administrative Code as from time to time amended, and the Codes and Standards and Recommended Guides as set forth by the National Fire Prevention Association as from time to time amended, and as they apply to the fire service, are incorporated herein by reference and adopted as part of this Fire Prevention Chapter:

- (1) Wis. Adm. Code Ch. ILHR 7; Explosives and Blasting Agents.
- (2) Wis. Adm. Code Ch. ILHR 10; Flammable and Combustible Liquids.
- (3) Wis. Adm. Code Ch. ILHR 11; Liquefied Petroleum Gases.
- (4) Wis. Adm. Code Ch. ILHR 12; Liquefied Natural Gas.
- (5) Wis. Adm. Code Ch. ILHR 13; Compressed Natural Gas.
- (6) Wis. Adm. Code Ch. ILHR 14; Fire Prevention.

- (7) Wis. Adm. Code Ch. ILHR 15; Cleaning and Dyeing.
- (8) Wis. Adm. Code Ch. IND 20; Dusts, Fumes, Vapors and Gases.
- (9) Wis. Adm. Code Ch. IND 21; Spray Coating.
- (10) Wis. Adm. Code Ch. ILHR 30; Fire Department Health and Safety Standards.
- (11) Wis. Adm. Code Ch. IND 32; Safety in Construction.
- (12) Wis. Adm. Code Ch. IND 43; Anhydrous Ammonia Code.
- (13) Wis. Adm. Code Ch. ILHR 50; Administration and Enforcement.
- (14) Wis. Adm. Code Ch. ILHR 51; Definitions and Standards.
- (15) Wis. Adm. Code Ch. ILHR 52; General Requirements.
- (16) Wis. Adm. Code Ch. ILHR 53; Structural Requirements.
- (17) Wis. Adm. Code Ch. ILHR 54; Factories, Office and Mercantile Buildings.
- (18) Wis. Adm. Code Ch. ILHR 55; Theatres and Assembly Halls.
- (19) Wis. Adm. Code Ch. ILHR 56; Schools and Other Places of Instruction.
- (20) Wis. Adm. Code Ch. ILHR 57; Apartment Buildings, Hotels, and Places of Detention.
- (21) Wis. Adm. Code Ch. ILHR 58; Health Care, Detention, and Correctional Facilities.
- (22) Wis. Adm. Code Ch. ILHR 59; Hazardous Occupancies.
- (23) Wis. Adm. Code Ch. ILHR 60; Child Day Care Facilities.
- (24) Wis. Adm. Code Ch. ILHR 61; CBRF.
- (25) Wis. Adm. Code Ch. ILHR 62; Specialty Occupancies.
- (26) Wis. Adm. Code Ch. ILHR 64; Heating, Ventilating, and Air Conditioning.
- (27) Wisconsin Electrical Code.
- (28) NFPA Codes and Standards; Volumes 1 through 11, and NFPA 72 Standards for the Installation, Maintenance and Use of Protective Signaling Systems.

(b) Whenever the provisions of the aforementioned codes conflict, the stricter interpretation shall apply.

SEC. 5-2-3 APPLICATION TO NEW AND EXISTING CONDITIONS.

The provisions of this Chapter shall apply equally to new and existing conditions except that existing conditions not in strict compliance with the terms of this Chapter shall be permitted to continue where the exceptions do not constitute a distinct hazard to life or adjoining property.

SEC. 5-2-12 SMOKE ALARMS AND/OR HEAT DETECTORS REQUIRED IN DWELLING UNITS.

(a) Smoke Detector Devices Required. The owner of every premises on which is located one (1) or more dwelling units within the Town shall install a smoke detection device so located as to protect the sleeping

areas of each dwelling unit. If sleeping areas are separated, the number of detection devices installed shall be that deemed sufficient by the Fire Inspector to protect each sleeping area.

(d) Installation and Design Standards.

(3) All smoke and heat detection devices shall bear the Underwriters' Laboratory seal of approval or Factory Mutual approval. All smoke detection devices shall meet the Underwriters Laboratory standard 217. At least one (1) smoke or heat detection device shall be installed for every dwelling unit located so as to protect sleeping areas.

SEC. 5-5-2 INSTALLATION REQUIRED. (AUTOMATIC FIRE SPRINKLERS)

(g) Nursing, Convalescent, Old Age and Other Like Institutional Buildings. Throughout all nursing, convalescent, old age and other like institutional buildings.

(j) Hazardous Properties. In buildings or structures, the occupancy or use of which involves a highly combustible, highly flammable or explosive material or that has characteristics that constitute a special fire hazard, including among others:

- (1) Aluminum powder factories.
- (2) Cellulose nitrate plastic factories.
- (3) Cereal mills.
- (4) Distilleries.
- (5) Explosives and pyrotechnics and manufacturing.
- (6) Flour and feed mills.
- (7) Gasoline bulk plants.
- (8) Grain elevators.
- (9) Lacquer and paint factories and paint shops, linseed oil and varnish works.
- (10) L.P.G. bulk plants.
- (11) Mattress factories.
- (12) Waste paper plants.
- (13) Aircraft hangers.
- (14) Chemical works.
- (15) Linoleum and oil cloth, shade, cloth manufacturing.
- (16) Oil refineries.

(17) Pytoxlin plastic manufacturing and processing.

(18) Other occupancies involving the processing, mixing, storage and dispensing of volatile liquids.

SEC. 5-5-3. INSTALLATION AND TESTING.

(a) Installation. Approved automatic fire sprinkler systems and equipment shall be installed in accordance with National Fire Protection Association guidelines, 13, 13D and 13R, Wis. Adm. Code, IND s.51.23, as well as any other guidelines that are in effect, which deal with the proper installation of such equipment.

(b) Reinstallation of equipment. The installation of used sprinkler heads is prohibited. The use of any other secondhand sprinkler system equipment shall be approved, in writing, by the Fire Chief prior to installation.

SEC. 5-5-4 APPLICABILITY OF CHAPTER.

(a) This Chapter shall apply to all new buildings and structures listed in Section 5-5-2 hereof, to existing buildings which the Fire Chief shall determine a severe life hazard exists to the occupants and users thereof with automatic sprinklers, subject to appeal to the Town Board of such determination.

(b) Nothing contained herein shall be construed as requiring the installation or automatic fire sprinklers in (1) safe deposit or other vaults; (2) places where the application of water may cause or increase combustion; or (3) in any other location where the installation of sprinklers may increase the hazard. Nor shall it be construed in any way to prohibit the substitution of other automatic protective equipment when approved by and under conditions acceptable to the Fire Chief and the Town Board.

Chippewa Falls

5.12 - FIRE INSPECTIONS, FIRE PREVENTION AND PUBLIC EDUCATION.

(1) PURPOSE. The purpose of fire inspections is to prevent fire loss by reducing or eliminating potential fire hazards within the community. This is accomplished through fire code enforcement and education. Physical on-site inspections are to be conducted of city commercial, industrial, educational, and governmental facilities, along with multifamily residential occupancies of 3 or greater.

(2) CODES ADOPTED FOR USE, OPERATION AND MAINTENANCE. The City of Chippewa Falls adopts and by reference makes a part of this chapter the following fire prevention codes for use, operation and maintenance:

NFPA 1 National Fire Protection Association - National Fire Prevention Code (Adopted by Wisconsin

Wisconsin Department of Commerce

Comm 14 Wisconsin Fire Prevention Code (Adopts NFPA 1 with Wisconsin-isms)

Comm 10 Wisconsin Flammable and Combustible Liquids Code

Comm 40 Wisconsin Gas Systems Code (Combines Comm 11 - Liquefied Petroleum Gases, Comm 12 - Liquefied Natural Gas, and Comm 13 - Compressed Natural Gas).

These equal NFPA 54 - National Fuel Gas Code and NFPA 58 - Liquefied Petroleum Gas Code.

(3) CODES ADOPTED FOR ALL NEW CONSTRUCTION BUILT AFTER JULY 1, 2002 The City of Chippewa Falls also adopts and by reference makes a part of this chapter the following fire prevention codes for all new construction built after July 1, 2002:

Comm 61—65 Wisconsin Commercial Building Code (Adopts IBC -International Building Code/Enrolled Code with Wisconsin-isms).
IBC International Building Code

(4) FUTURE AMENDMENTS, REVISIONS, OR MODIFICATIONS. Any future amendments, revisions, or modifications of the codes adopted herein, are intended to be made part of this chapter.

(5) PUBLIC EDUCATION. Public education is an important tool and mission of the fire service. Programs are to be developed and conducted to increase the communities' awareness of fire safety, fire prevention, medical safety, and injury prevention. These programs also promote positive public relations for the department and for the City of Chippewa Falls. Main target age groups will be preschool through the 6th grade along with senior citizens.

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5.01 - GENERAL PROVISIONS.

(2) APPLICATION.

(b) The provisions of this Code shall apply equally to new structures, including additions to existing structures and existing conditions, except that existing conditions not in strict compliance with the terms of this subsection shall be permitted to continue where the exceptions do not constitute a distinct hazard to life or adjoining property, as determined by the authority having jurisdiction (AHJ), or have been superseded by this Code.

(3) ADDITIONS TO, CHANGE OF USE, RENOVATED, ALTERED OR REMODELED BUILDINGS.

(a) If 50 percent or more of the total floor area of a building is renovated, altered or remodeled and/or added to the existing building, the entire building shall be brought into compliance with the requirements of this Code.

(b) If 25 to 49 percent of the total floor area of a building is renovated, altered or remodeled, the portion of the building that is remodeled shall be brought into compliance with the requirements of this Code.

(d) All percentages of remodeling shall be cumulative as applied to (a), (b), and (c) above.

(f) If any addition is made to an existing building and/or structure that currently has a fire sprinkler, fire suppression, fire control or fire alarm system installed, the addition shall comply completely with this Code.

(g) If any addition is made to an existing building and/or structure that currently has a fire sprinkler, fire suppression, fire control or fire alarm system installed, the addition shall have a fire sprinkler, fire suppression, fire control or fire alarm system installed.

(h) If the use of and/or contents of any existing building is changed and becomes more hazardous as determined by the authority having jurisdiction (AHJ), the building shall be brought into compliance with this Code.

5.12 - AUTOMATIC FIRE SPRINKLER, FIRE CONTROL AND/OR FIRE SUPPRESSION SYSTEM PROTECTION.

(2) CODE COMPLIANCE. All automatic fire sprinkler, fire control and/or fire suppression systems installed, modified, altered and/or repaired, shall comply with this Code and the applicable NFPA codes and/or standards.

(3) CODE CONFLICTS. If any conflicts exist between this Code and any NFPA code and/or standard, the most restrictive, as determined by the AHJ, shall be enforced by the AHJ.

(6) INSTALLATION REQUIRED. Automatic fire sprinkler systems shall be installed in all structures where the floor area exceeds the thresholds established in Table 5.06(5) of the specific occupancy type and construction type involved. For the purpose of determining square footage as it relates to the required installation of fire sprinklers in a building, firewalls shall not be considered area dividers unless the firewall is rated at 4 hours without penetrations and extends a minimum of 3 feet above the roof.

TABLE 5.12 6

Occupancy

Type	Type I	Type II	Type III	Type IV	Type V
E*	All	All	All	All	All
I-2	All	All	All	All	All
I-3	All	All	All	All	All
I-4	All	All	All	All	All
R-4	All	All	All	All	All
U	5,000 SF	5,000 SF	5,000 SF	5,000 SF	5,000 SF

Note: * Excludes single-family home day cares

(7) ADDITIONAL AUTOMATIC FIRE SPRINKLER SYSTEM INSTALLATIONS REQUIRED. An automatic sprinkler system shall be installed in all:

- (a) Parking structures above and below ground with ceilings.
- (b) CBRFs (community based residential facilities).
- (c) Adult family homes.
- (d) Throughout all dormitories, fraternities and sorority houses.
- (e) Throughout every building, new or existing, which by reason of its construction or combustible occupancy involves a life hazard to its occupants or in the judgment of the AHJ constitutes a fire menace.
- (f) Throughout all mini warehouses and unattached multifamily parking garages that exceed any of the following:
 1. Three thousand square feet or more in area on any floor.
 2. Two stories in height.
 3. Any portion of the structure is below grade level.

(8) [BASEMENTS AND GARAGES.] Basements and garages are to be designed to protect as a minimum of for ordinary hazard occupancy.

(9) [INSTALLATION OF AUTOMATIC FIRE SPRINKLER SYSTEM IN STRUCTURE NOT CURRENTLY SERVICED BY MUNICIPAL WATER SOURCE.] When an automatic fire sprinkler system is required to be installed by this Code but not the Wisconsin Department of Commerce, in a structure that is not currently serviced by a municipal water source, the following must be complied with:

(a) Any required fire sprinkler system shall be installed in complete compliance with the appropriate NFPA code(s) and/or standard(s). Exception: An automatic water supply for any fire sprinkler system(s) required to be installed by this Code but not required by the Wisconsin Department of Commerce Code, the automatic water supply shall comply with the following:

2. The fire sprinkler system(s) shall be installed and connected to a conditionally approved automatic water supply.

4. The required automatic water supply must be capable of delivering the required quantity of water at the required pressure as determined by hydraulically calculating the system demand in accordance with NFPA 13 for the most hydraulically demanding area.

(b) Within 90 days after a municipal water system becomes available, the sprinkler system shall be connected to the municipal water supply.

(c) For the purpose of this Code, an available municipal water supply shall be any of the following:

1. A municipal water main located at or near the streets adjacent to the property the structure that is required to be sprinklered is located on.

2. A municipal water main located in a utility easement on or near the property the structure that is required to be sprinklered is located on.

3. A municipal water main located at or near the streets within 1,500 lineal feet of any part of the property the structure that is required to be sprinklered is located on.

4. A municipal water main located in a utility easement within 1,500 lineal feet of any part of the property the structure that is required to be sprinklered is located on.

(10) [SYSTEMS COMPLIANCE.] All automatic fire sprinkler, fire control and/or fire suppression systems shall comply with the following:

(a) Be designed in accordance with the appropriate NFPA standards and/or codes.

(c) Be design to protect the highest hazard present at any time in the protected area.

(d) Be monitored by a central station or an alternate monitoring service that is acceptable to the AHJ.

(e) Have sprinkler control rooms located with adequate access for Fire Department, sprinkler maintenance and inspection personnel and shall not be located within private dwellings with the exception of NFPA 13D systems.

(f) Have direct access from the exterior to the sprinkler control valve acceptable to the AHJ.

(g) Have a bell (minimum 10-inch) and strobe install, located above the FDC.

(h) The FDC must be located at least 40 feet from all gas meters, electrical meters and transformers.

(i) The FDC must be installed in a location acceptable to the AHJ.

(j) Be designed for the hazard being protected or as specifically specified in this Code and/or as acceptable to the AHJ.

(k) All automatic fire sprinkler systems hydraulic designs are to be based on a maximum of 90 percent of the available water supply (a minimum of a 10 percent safety margin shall be maintained).

(1) All sprinkler systems designed shall be based on the most current water flow test conducted in accordance with NFPA 291 that is acceptable to the AHJ.

(13) EXEMPTIONS. Any location where the installation of sprinklers may cause or increase an occupational hazard as determined by any governmental authority having jurisdiction over such location or occupation the AHJ may waive any requirement to install an automatic fire sprinkler system or any portion thereof.

5.13 - STANDPIPES.

(2) WHERE REQUIRED. Fire Department standpipe systems shall be installed in the following structures:

(a) Any structure required by the State of Wisconsin Codes.

(b) In all new structures over 2 stories in height.

(c) In any structure that exceeds 10,000 square feet in floor area.

(d) In any structure that the AHJ deems standpipes are necessary for firefighting purposes.

(e) Temporary standpipes must be installed in an approved location for all of the following structures:

1. All combustible structures exceeding 2 stories in height.

2. All noncombustible structures exceeding 3 stories in height.

(3) INSTALLATION REQUIREMENTS. Fire Department standpipes shall be designed and installed in accordance with this section. Where any requirement in this section is more restrictive than any NFPA standard and/or code and/or State code, the requirements in this section must be complied with.

(a) The installation of standpipes shall be in accordance with this section and NFPA 14.

(b) The class and location of standpipes and Fire Department connections shall be acceptable to the AHJ.

(c) All standpipe systems hydraulic designs are to be based on a maximum of 90 percent of the available water supply (a minimum of a 10 percent safety margin shall be maintained).

- (f) The location of standpipe hose connections shall be accessible and shall be located so that all positions of the building are within 100 feet of hose attached to a hose valve. This distance must be measured using the nonnal aisles or the path a hose would be laid as determined by the AHJ.
- (g) The locations of all hose valves shall be acceptable to the AHJ.
- (h) The AHJ may require additional standpipes and/or hose valve to be installed.
- (i) All structures over 3 stories shall have Class I standpipes installed in accordance with NFPA 14.
- (j) When required by the AHJ, an approved standpipe shall be installed as construction progresses to make them available for Fire Department use in the top most floors constructed. Temporary standpipes shall be provided in place of permanent standpipes when required, during the period of construction on buildings required by this Code.
- (k) The location of all Fire Department connections for standpipes shall be approved by the AHJ.
- (l) The Fire Department connections shall be located at least 40 feet from all electrical transformers, gas meters, or propane storage.
- (m) Temporary standpipes are required on buildings over 2 stories in height.

5.14 - FIRE ALARM SYSTEMS.

(2) INSTALLATION REQUIRED. A fire alarm system shall be installed in all structures where the floor area exceeds the thresholds established in Table 5 .14(2) of the specific occupancy type and construction type involved.

TABLE 5.14 2

Occupancy

Type	Type I	Type II	Type III	Type IV	Type V
E*	All	All	All	All	All
F1	5,000 SF	5,000 SF	3,000 SF	3,000SF	3,000 SF
F2	5,000 SF	5,000 SF	3,000 SF	3,000SF	3,000 SF
I-2	All	All	All	All	All
I-3	All	All	All	All	All
I-4	All	All	All	All	All
R-3	State Statutes apply				
R-4	All	All	All	All	All
S-1	3,000 SF	3,000 SF	3,000 SF	3,000 SF	3,000 SF
S-2	5,000 SF	5,000 SF	3,000 SF	3,000 SF	3,000 SF
U	5,000 SF	5,000 SF	3,000 SF	3,000 SF	3,000 SF

* Excludes single-family home daycares, State Statutes apply.

(3) MINIMUM SYSTEM REQUIREMENTS. The following minimum system requirements shall be met when any occupancy type exceeds the limits in Table 5.14(2). Minimum system requirements shall include:

- (a) Audible notification appliances shall be installed throughout protected premises.
- (b) Visible notification appliances shall be installed throughout protected premises. Exceptions:

1. Closets and/or other similar small storage rooms that do not exceed 50 square feet in floor area and are not normally occupied.
2. Normally unoccupied crawl spaces.
3. Normally unoccupied attic spaces.
4. Any nonaccessible area.
5. Any area the AHJ deems visible notification appliances are not required.

(d) Manual initiating devices (pull stations) shall be located at all points of egress including all exit doors on every floor and/or building level.

(e) Water flow detection devices shall be connected to the fire alarm system to specifically activate the notification appliances upon water flow.

(f) Fire suppression system activation alarms shall be connected to the protected premises fire alarm system to specifically activate the notification appliances upon system activation. This includes but is not limited to wet chemical, CO₂, clean agent, water mist and dry chemical systems.

(g) Fire control and/or suppression systems supervisory condition indicators shall be connected to and monitored by the fire alarm system. This specifically includes but is not limited to: valve supervisory switches (tamper switches), low air switches, low water switches, low temperature switches, fire pump condition indicators and/or any other situation or condition deemed necessary by the AHJ.

(h) Fire alarm systems shall be addressable and capable of indicating the status of all specific components connected to the system.

(i) All fire alarm systems shall be monitored by a service acceptable to the AHJ.

(j) Fire alarm annunciators shall be installed in all protected premises. The number and locations of the fire alarm annunciators installed shall be acceptable to the AHJ.

(k) As determined by the AHJ, any additional notification and/or initiation appliances/devices may be required due to size, occupancy hazards, building construction, and/or occupancy use.

(6) SPECIAL REQUIREMENTS. On all buildings over 4 stories in height a fire command center for Fire Department operations shall be provided. The fire command center shall comply with NFP A 72 and shall contain the features required in the International Fire Code and NFPA 1 and NFPA 101.

(a) Two-way telephone communication service shall be provided for Fire Department use. This system shall be in accordance with NFPA 72. The communications system shall operate between the central control station and every elevator car, every elevator lobby, and each floor level of exit stairs.

(9) FIRE ALARM CONTROL PANELS. Shall display the status of the system components and be installed in a location acceptable to the AHJ. Adequate access for Fire Department, alarm maintenance, and inspection personnel shall be maintained. Fire alarm control panels shall not be located within private dwellings with the exception of one-family and two-family dwellings.

16.32.050 Smoke detectors. A. Scope. The requirements of this chapter shall apply to all new and existing apartment buildings, rooming houses, hotels, motels, dormitories, convents, monasteries, children's homes, homes for the aged and infirm, row houses, convalescent homes, jails, dwellings containing three or more rental units, and other places of abode or detention.

C. Approval. A smoke detector required under this section shall be listed by Underwriters Laboratory or a nationally recognized testing agency.

D. Installation and Maintenance.

1. All smoke detectors required under this section shall be installed according to the directions and specifications of the manufacturer.

Fitchburg

DIVISION 1. GENERALLY

Sec. 44-177. - APPLICABILITY.

Except as specifically otherwise provided herein, the provisions of this fire prevention code shall apply equally on public and private property and to all locations.

Sec. 44-179. - NATIONAL AND STATE FIRE SAFETY CODES ADOPTED.

(a) Except as provided in subsection (b) of this section, there are hereby adopted as part of the fire prevention code of the city and incorporated herein as if fully set forth the following codes and standards:

(1) NFPA 1, 1987 edition, "Fire Prevention Code," of the National Fire Protection Association, including its incorporated Standards, Annexes, Codes and Appendices, as published in the National Fire Codes of the National Fire Protection Association.

DIVISION 7. HIGH RISE BUILDINGS

Sec. 44-339. - SCOPE.

This section shall apply to all buildings, having floors located more than 60 feet above the lowest interior level or exceeding five stories.

Sec. 44-340. - CONSTRUCTION.

(1) *Stairway doors and telephones.* Doors from stairways to floors may be locked only if provided with remote release from building control station. Stairways must have telephone or intercom to building control station at least every three floors if locked. On power failure locks must release and the door must remain unlocked.

Sec. 44-341. - AUTOMATIC SPRINKLER AND STANDPIPE SYSTEMS.

(a) An automatic sprinkler system shall be installed in accordance with article V, division 4 of this chapter, pertaining to automatic sprinkler systems.

(b) A standpipe system shall be installed in accordance with article V, division 3 of this chapter, pertaining to standpipe and hose systems.

(c) Shutoff valves and water flow detection devices for the standpipe and sprinkler systems shall be provided for each floor.

(d) Standpipe and sprinkler valves shall be supervised by a continuously manned station or central station.

Sec. 44-342. - FIRE AND SMOKE DETECTION SYSTEMS.

Fire and smoke detection systems shall be installed in accordance with article VI, division 3 of this chapter. In addition, the following shall be installed:

(1) At least one approved smoke detector, suitable for the intended use, shall be installed:

a. Within every mechanical equipment, electrical transformer or control, telephone equipment, elevator machine or similar room.

b. Within the main return and exhaust air plenum of each air conditioning system and located in a serviceable area downstream of the last duct inlet.

(2) Detectors installed under subsection (1) of this section shall activate an alarm or signaling system and shut down the ventilation system except where automatic smoke control is incorporated in the system.

(3) Approved heat detection equipment shall be installed in boiler rooms and furnace rooms in lieu of smoke detection equipment.

Sec. 44-343. - ALARM AND COMMUNICATIONS SYSTEMS.

The alarm and communications system shall be installed in compliance with NFPA 72F, "Emergency Voice/Alarm Communication Systems," and the following standards:

(1) *Installation.* The alarm and communications systems shall be designed and installed so that damage to any terminal unit or speaker will not render more than one zone of the system inoperative.

(2) *Voice alarm system.* The operation of any smoke detector, sprinkler, water flow device or manual fire alarm station shall automatically sound an alarm signal to the desired areas, followed by voice instructions giving appropriate information and direction to the occupant. The voice alarm and public address system may be a combined system. When approved by the fire department, the communications system may be combined with the voice alarm system and the public address system.

a. The central control station shall contain controls for the voice alarm system so that a selective or general voice alarm may be manually initiated.

b. The system shall be supervised to cause the activation of an audible trouble signal in the central control station upon interruption or failure of the audiopath, including amplifiers,

speaker wiring, switches and electrical contacts, and shall detect opens, shorts and grounds which might impair the function of the system.

c. The alarm shall be designed to be heard clearly by all occupants within the building or designated portions thereof as is required for the public address system.

(3) *Public address system.* A public address communications system designed to be clearly heard by all occupants of the building shall operate from the central control station. It shall be capable of directing messages selectively or on a general basis to the following terminal areas:

- a. Elevators.
- b. Elevator lobbies.
- c. Corridors.
- d. Exit stairways.
- e. Rooms and tenant spaces exceeding 1,000 square feet in area.
- f. Dwelling units.
- g. Hotel guestrooms and/or suites.

(4) *Fire department communications system.* A central control station for fire department operations shall be provided in a location approved by the department. This station shall contain:

- a. Voice alarm and public address system control panels;
- b. Two-way communications between the control station and all elevators, elevator lobbies, exit access and stairways at each floor. The type of equipment proposed for this function shall be approved by the fire department;
- c. Fire detection and alarm system annunciator panels;
- d. Annunciator visually indicating the location and status of each elevator;
- e. Status indicators and controls for air-handling systems;
- f. Controls for unlocking all stairway doors simultaneously;
- g. Sprinkler valve and water flow detector display panels;
- h. Standby power controls and status indicators;
- i. A telephone for fire department use with controlled access to the public telephone system;
- j. Small scale layout plan of building showing all permanent partitions, identifying permanent areas and doorways, exterior wall openings suitable for use in smoke ventilation, elevator locations and stair locations;

k. Diagrams to indicate the location of the main shutoffs for sprinkler or standpipe systems, electrical, water, gas and steam systems with an indication of the areas served by each of these main shutoffs;

l. A list of names indicating all key building operating personnel and where they may be reached;

m. An emergency plan of action for the building with personnel responsibilities defined.

Sec. 44-344. - STANDBY POWER AND LIGHTING.

(a) An approved, permanently installed standby power generating system shall be provided. The system shall be equipped with suitable means for automatically starting the generator set upon failure of the normal electrical service and for automatic transfer and operations of the required electrical functions at full power within 60 seconds of such normal service failure.

(b) System supervision with manual start and transfer features shall be provided at the central control station. An on-premises fuel supply, sufficient for not less than 12 hours full demand operation of the system shall be provided. The power requirement shall be determined so as to provide service to, but not limited to, fire alarm system, exit and other emergency lighting, fire protection equipment, mechanical ventilation equipment, elevators, communications systems.

DIVISION 3. STANDPIPE AND HOSE SYSTEMS

Sec. 44-494. - INSTALLATION STANDARDS.

Standpipe and hose systems shall be installed in accordance with Wis. Admin. Code § COMM 75.22 or NFPA 14, "Standards for Installation of Standpipe and Hose Systems." Standpipe and hose systems required herein shall be of class I or III types, as specified in NFPA 14. Wet standpipe systems may be an integral part of an approved automatic sprinkler system, provided calculations for required fire flows have been submitted with sprinkler system plans.

Sec. 44-497. - AREAS WITH AN INADEQUATE MUNICIPAL WATER SUPPLY.

Any building erected for any of the uses described in section 44-493 in an area in which the municipal water supply cannot, for any reason, provide the water pressure or volume necessary to operate a standpipe and hose system shall have an approved fire pump or secondary water supply installed to provide the required water flow for that occupancy.

Sec. 44-525. - INSTALLATION.

Except for one- and two-family dwellings, the installation of any automatic fire sprinkler systems shall be completed in accordance with NFPA 13, "Installation of Sprinkler Systems." In one- and two-family dwellings automatic fire sprinkler systems shall be installed in accordance with NFPA 13D, "Standards for the Installation of Sprinkler Systems in 1 and 2 Family Dwellings and Mobile Homes."

Sec. 44-528. - WHERE REQUIRED.

Classification of construction for purposes of this division is determined under the Wis. Admin. Code ch. COMM 75. Automatic sprinkler systems shall be installed and maintained in operable condition in the following new occupancies and locations:

(4) New theaters and buildings of public assembly over 100-person occupancy. Automatic sprinklers shall be installed throughout such buildings regardless of size or type of construction.

(5) New health care facilities including hospitals, nursing homes, convalescent and group care centers. Automatic sprinklers shall be installed throughout such buildings regardless of size or type of construction.

(6) New detention and correctional facilities. Automatic sprinklers shall be installed throughout the building regardless of size of construction.

(8) High hazard occupancy. Throughout any new building which by reason of its construction or combustible occupancy is deemed a severe life or property hazard by the fire chief. This includes, but shall not be limited to:

- a. Aircraft/helicopter hangers, aircraft/helicopter servicing.
- b. Dry cleaning establishments using or storing volatile or flammable liquids.
- c. Enameling or Japanning operations.
- d. Mills.
- e. Paint and varnish, manufacturing, storage, handling, spraying or other related operations.
- f. Pyroxylin products.
- g. Smoke houses.
- h. Storage of combustible and flammable gases such as acetylene, hydrogen, liquid propane, etc., in excess of 1,000 cubic feet.
- i. Storage of combustible and flammable liquids such as kerosene, oil gasoline, etc., in excess of 500 gallons.
- j. Woodworking establishments.
- k. Chemical works.
- l. Warehouses with materials piled 15 feet or more in height.
- m. Explosive and pyrotechnic manufacturing and storage.
- n. Basements over 2,500 square feet and containing combustible materials or storage within.

Sec. 44-529. - EXCEPTIONS.

Automatic fire sprinkler systems are not required in the following:

(1) Rooms or buildings used for the manufacture or storage of aluminum powder, calcium carbide, calcium phosphide, metallic sodium or potassium, quick lime, magnesium powder, sodium peroxide or like materials where the application of water may cause or increase combustion.

(2) Any location where the fire chief determines that the use of water as a fire extinguishing agent would increase the hazard. However, an automatic fire suppression system using an extinguishing agent other than water, or an automatic smoke detection system, shall be installed.

Sec. 44-532. - PLAN REVIEW; INSTALLATION AND INSPECTION.

(c) *System requirements.* All required building automatic sprinkler systems shall comply with the following, provided existing systems not in compliance on the effective date of the ordinance from which this division is derived shall have 12 months to come into compliance.

(1) *System drain.* The building automatic sprinkler system shall have a drain piped to the outside of the building or to a drain suitable to handle the required flows.

(2) *Inspector's test valve.* The system shall have an inspector's test valve piped so as to discharge to the outside of the building.

(3) *Alarm bells or horns.* Alarm bells or horns shall be installed on all systems. One bell or horn shall be installed on the inside of the building and a second bell or horn installed on the outside of the building. The sprinkler alarm shall be tied into the building alarm system in buildings equipped with a local alarm system.

DIVISION 3. FIRE AND SMOKE DETECTION SYSTEMS

Sec. 44-630. - SCOPE.

To provide early warning in the event of fire, detection systems shall be installed and maintained in operable condition in the following the following locations:

(1) *Schools.* All new schools, regardless of size shall have a manual alarm system with heat detection installed in mechanical rooms.

(4) *Health care facilities.* Any new health care facility regardless of size shall be equipped with a manual alarm system with automatic detection as specified within NFP A 72E.

(5) *Correctional/detention facilities.* Any new correction/detention facility regardless of size shall be equipped with a manual alarm system with automatic detection as specified within NFPA 72E.

(7) *High hazard occupancies.* Any new high hazard occupancy deemed a severe life or property hazard by the fire chief shall be equipped with a detection system as provided in this section.

Sec. 44-631. - STANDARDS FOR EQUIPMENT AND INSTALLATION.

(a) *Components to be listed.* All components of a fire or smoke detector system shall be listed by Underwriter's Laboratories (UL) or the Factory Mutual System (FM). The entire installation shall conform to applicable provisions of the National Fire Protection Association Standards 71, 72A, 72C, 72D or 72E.

(b) *Backup power system.* The fire alarm system shall monitor the integrity of all alarm initiating and indicating appliance circuits, and shall be provided with automatically charged standby batteries to maintain system operation for 24 hours in the normal supervisory mode, plus have sufficient capacity to operate in the alarm mode for five minutes at the conclusion of this supervisory time period. Batteries

shall be supervised for connection to the system and a low voltage threshold. The automatic battery charger shall be capable of charging fully discharged system batteries to 100 percent.

(c) *Remote annunciator.* A remote annunciator shall be provided at the main entrance of the building to indicate each of the designated alarm initiating zones via red LEDs which flash when in alarm and lock in upon acknowledging the alarm. The remote annunciator shall be electrically supervised from the main fire alarm control panel. Space shall be provided on the remote annunciator for custom zone labels. The zone labels shall plainly describe the location of the zones.

Sec. 44-632. - SYSTEM OPERATION.

(d) The alarm system shall be equipped with the following:

(1) Desired type of signal operation; alarm signal tempos, area selective codes, zone codes, or general alarm codes.

(2) UL or FM approved alarm verification operation.

(3) Waterflow/sprinkler supervisory operation on a distinct zone.

(e) Upon actuation of a smoke detector, the LED on the smoke detector shall remain constantly illuminated until the system is reset.

DIVISION 4. EXISTING BUILDINGS

Sec. 44-663. - GENERAL EXCEPTION.

Except as hereinafter provided automatic fire sprinklers, smoke detectors and standpipes need not be installed in buildings which exist or were under construction before July 10, 1978, unless such installation was required by previous ordinance, administrative regulation or state statute.

Sec. 44-664. - EXPANSION AND REMODELING.

(a) When a building is expanded or remodeled and the building is of a size, a type, or a use, which, if the building were to be constructed new, the provisions of division 3 of this article or article V, division 3 or 4 of this chapter would apply, the building or part thereof shall be subject to the following requirements:

(1) If more than 50 percent of the gross interior area of the building is remodeled or added to the building, the entire building shall be made to conform to the requirements of division 3 of this article and article V, divisions 3 and 4 of this chapter.

(5) In determining the foregoing percentages, successive additions, expansions or remodeling if made within a period of 20 years shall be aggregated and treated as a single expansion or addition.

(6) Regardless of any percentage set forth in this section, if the additional, expanded, or remodeled area is of a size or type or for a use which is subject to the provisions of article III, division 7 or article V, division 3 or 4 of this chapter the additional, expanded, or remodeled area must conform to the requirements of such sections.

Sec. 44-665. - SALE AND TRANSFER.

At the time any building containing dwelling units situated within the city is sold, transferred or conveyed, the building shall be made to conform to the requirements of article V, division 4 of this chapter.

Sec. 44-666. - CHANGE IN USE.

(a) Where at the time of its construction a building or any part thereof is exempt from the requirements of division 3 of this article by reason of its proposed intended use and subsequent to construction the use of such building or parts thereof is changed in such a way that the reason for the exemption no longer exist shall be made to conform with the requirements of division 3 of this article.

(b) If the use of an existing building or structure is changed and the requirements for the new use are more stringent than those for the previous use, the building or structure shall be made to comply with the requirements for the new use as provided in this article.

Fox Point

11.03(2)D. HAZARDOUS PROPERTIES OR SPECIAL CONCERNS.

Throughout every building which by reason of its construction or the highly combustible nature of its occupancy involves a severe hazard to the life of its occupants or, in the judgment of the authority having jurisdiction, constitutes a fire hazard which by its very nature may more directly affect adjoining properties.

Franklin

Chapter 133 FIRE PREVENTION, PROTECTION AND CONTROL CODE

133-1 GENERAL PROVISIONS

B. Applicability.

- (1) The provisions of this code shall apply to all public buildings and places of employment. Exceptions: The following buildings and uses are not public buildings or places of employment and are not subject to the provisions of this code:
 - (a) One- and two-family dwellings.
 - (b) Buildings used exclusively for fanning as described in § 102.04(3), Wis. Stats.
 - (c) Nothing contained in this section shall be construed as applying to the transportation of any article or thing shipped in conformity with the regulations prescribed by the Interstate Commerce Commission, or as applying to the military forces of the United States.
- (2) The provisions of this code shall apply equally to new structures, including additions to existing structures and existing conditions, except that existing conditions not in strict compliance with the terms of this subsection shall be permitted to continue where the exceptions do not constitute a distinct hazard to life or adjoining property, as determined by the authority having jurisdiction (A.H.I), or have been superseded by this code.
- (3) The provisions of this code apply equally to the property owner and/or occupant.

(4) Sections 133-8, 133-9, 133- 10, 133-11 , 133-14, 133-1 SC: (1), (2), (3), (5), (6), 133- 17, and 133-22 apply to all individuals and/or properties within the jurisdiction of the municipality.

C. Additions to, change of use, renovated, altered or remodeled buildings.

- (1) If 50% or more of the total floor area of a building is renovated, altered or remodeled and/or added to the existing building, the entire building shall be brought into compliance with the requirements of this code.
- (2) If 25% to 49% of the total floor area of a building is renovated, altered or remodeled, the portion of the building that is remodeled shall be brought into compliance with the requirements of this code.
- (4) All percentages of remodeling shall be cumulative as applied to Subsection C (I), (2) and (3) above.
- (6) If any addition is made to an existing building and/or structure that currently has a fire sprinkler, fire suppression, fire control or fire alarm system installed, the addition shall comply completely with this code.
- (7) If any addition is made to an existing building and/or structure that currently has a fire sprinkler, fire suppression, fire control or fire alarm system installed, the addition shall have a fire sprinkler, fire suppression, fire control or fire alarm system installed.
- (8) If the use of and/or contents of any existing building are changed and become more hazardous as determined by the authority having jurisdiction (AHJ), the building shall be brought into compliance with this code.
- (9) Those portions, elements, systems or components of existing buildings and structures to be renovated, altered, remodeled or modified on or after the effective date of the rules under this code, and where the alteration, modification or the addition affects a building element or component relating to subject matters regulated by this code, shall be designed, constructed and maintained in accordance with the applicable rules of this code as the rules exist on one of the following:
 - (a) The date plans for the alteration or modification are conditionally approved by the AHJ.
 - (b) The date the local building permit is issued.
 - (c) The date the replacement is initiated, where Subsection C(9)(a) and (b) do not apply.

K. Temporary use. The AHJ may allow a building or portion of a building to be used temporarily in a manner that differs from the approved use for the building or space, or may approve a temporary building to be used by the public, subject to all of the following provisions:

- (1) The AHJ shall determine the time frame within which the temporary use is permitted, based on the extent hazards are created by the temporary use.
- (2) The AHJ shall determine maximum occupancy load.
- (3) The AHJ shall determine any fire protection and/or control devices and life safety provisions that may be needed.

§ 133-6. AUTOMATIC FIRE SPRINKLER FIRE CONTROL AND/OR FIRE SUPPRESSION SYSTEM PROTECTION.

B. Code Compliance. All automatic fire sprinkler fire control and/or fire suppression systems installed, modified, altered and/or repaired shall comply with this code and the applicable NFP A codes and/or standards.

C. Code conflicts. If any conflicts exist between this code and any NFPA code and/or standard, the most restrictive, as determined by the AHJ, shall be enforced by the AHJ.

F. Installation required. Automatic fire sprinkler systems shall be installed in all structures where the floor area exceeds the thresholds established in Table 133-6F of the specific occupancy type and construction type involved. For the purpose of determining square footage as it relates to the required installation of fire sprinklers in a building, firewalls shall not be considered area dividers unless the firewall is rated at four hours without penetrations and extends a minimum of three feet above the roof.

Table 133-6F

Occupancy

Type	Type I	Type II	Type III	Type IV	Type V
E*	All	All	All	All	All
F2	5,000 SF	5,000 SF	3,000 SF	3,000SF	3,000 SF
I-2	All	All	All	All	All
I-3	All	All	All	All	All
I-4	All	All	All	All	All
R-4	All	All	All	All	All
U	5,000 SF	5,000 SF	3,000 SF	3,000 SF	3,000 SF

Note: *excludes single-family-home day cares

G. Additional automatic fire sprinkler system installations required. An automatic sprinkler system shall be installed in all:

- (1) Parking structures above and below ground with ceilings.
- (2) CBRFs (community-based residential facilities).
- (3) Adult family homes.
- (4) Throughout all dormitories, fraternities and sorority houses.
- (5) Throughout every building, new or existing, which by reason of its construction or combustible occupancy involves a life hazard to its occupants or in the judgment of the AHJ constitutes a fire menace.
- (6) Throughout all miniwarehouses and unattached multifamily parking garages that exceed any of the following:
 - (a) Five thousand square feet or more in area on any floor.
 - (b) Two stories in height.
 - (c) Any portion of the structure is below grade level.

I. Basements and garages are to be designed to protect, as a minimum for ordinary hazard occupancy.

J. When an automatic fire sprinkler system is required to be installed by this code but not the Wisconsin Department of Commerce, in a structure that is not currently serviced by a municipal water source:

(1) All fire sprinkler systems shall be installed in complete compliance with the appropriate NFPA code(s) and/or standard(s). Exception: An automatic water supply for any fire sprinkler system(s) required to be installed by this code but not required by the Wisconsin Department of Commerce Code, if acceptable to the AHJ, the automatic water supply shall be allowed to comply with the following:

(a) The automatic water supply for the automatic fire sprinkler system(s) shall be conditionally approved by the AHJ.

(b) The fire sprinkler system(s) shall be installed and connected to a conditionally approved automatic water supply.

(d) The required automatic water supply must be capable of delivering the required quantity of water at the required pressure as determined by hydraulically calculating the system demand in accordance with: NFPA 13 for the most hydraulically demanding area.

(2) Within 90 days after a municipal water system becomes available the sprinkler system shall be connected to the municipal water supply.

(3) For the purpose of this code, an available municipal water supply shall be any of the following:

(a) A municipal water main located at or near the streets adjacent to the property on which the structure that is required to be sprinklered is located.

(b) A municipal water main located in a utility easement on or near the property on which the structure that is required to be sprinklered is located.

(c) A municipal water main located at or near the streets within 1,500 lineal feet of any part of the property on which the structure that is required to be sprinklered is located.

(d) A municipal water main located in a utility easement within 1,500 lineal feet of any part of the property on which the structure that is required to be sprinklered is located.

K. All automatic fire sprinkler, fire control and/or fire suppression systems shall comply with the following:

(1) Be designed in accordance with the appropriate NFPA standards and/or codes.

(3) Be designed to protect the highest hazard present at any time in the protected area.

(4) Be monitored by a central station or an alternate monitoring service that is acceptable to the AHJ.

(5) Have sprinkler control rooms located with adequate access for fire Department, sprinkler maintenance and inspection personnel and shall not be located within private dwellings, with the exception of NFPA 13D systems.

(6) Have direct access from the exterior to the sprinkler control valve acceptable to the AHJ.

(7) Have a bell (minimum ten-inch) and strobe installed, located above the Fire Department connection (FDC).

(8) The FDC must be located at least 40 feet from all gas meters, electrical meters and transformers.

(9) The FDC must be installed in a location acceptable to the AHJ.

(10) Be designed for the hazard being protected or as specifically specified in this code and/or as acceptable to the AHJ.

(11) All automatic fire sprinkler systems hydraulic designs are to be based on a maximum of 90% of the available water supply (a minimum of a ten-percent safety margin shall be maintained).

(12) All sprinkler systems designed shall be based on the most current water flow test conducted in accordance with NFP A 291 that is acceptable to the AHJ .

(19) Sprinkler protection for exposed expanded plastics must comply with all FM Global testing and standards.

M. Application to existing buildings.

(1) Adult family homes and community-based residential facilities (CBRF), regardless of number of occupants or class, must be retrofitted with fire sprinkler protection acceptable to the AHJ.

(2) Where the AHJ finds that an existing building, because of current occupancy or a change in occupancy, constitutes a hazard to its occupants or adjoining property, the AHJ may order compliance with the provisions of this section. A hazard shall be determined by the existence of one or more of the following conditions:

(a) Any building which by reason of its construction or highly combustible occupancy involves a hazard to its occupants or, in the judgment of the AHJ, constitutes a fire menace, e.g., paint shop and other occupancies involving processing, mixing, storing, and dispensing of volatile liquids or solids.

(b) Non-fire-resistive characteristics of a structure.

(c) Accumulation of flammable or combustible materials.

(d) Lack of accessibility to the premises for fire-fighting equipment.

(e) Substantial number of fire calls or complaints on the premises.

(f) Traffic patterns for pedestrian ingress and egress which require protection under this section.

(g) Insufficient ventilation system.

(h) Where there is a lack of an internal communication system, or due to the size or type of building making regular Fire Department radio communication inoperable, the building owner is required to install a repeater system or something comparable to assist radio communications. If any inspection reveals a need for a new, replacement or modified repeater or other comparable system, the inspection report shall order such correction within 180 days of the inspection.

(i) Number, characteristics and movement of employees which require protection under this section.

(3) Installation of an automatic sprinkler system must be started within one year from the service of such orders and shall be completed within 180 days after construction has started.

N. Exemptions. In any location where the installation of sprinklers may cause or increase an occupational hazard, as determined by any governmental authority having jurisdiction over such location or

occupation, the AHJ may waive any requirement to install an automatic fire sprinkler system or any portion thereof.

§ 133-13. STANDPIPES.

B. Where required.

(1) Fire Department standpipe systems shall be installed in the following structures:

(a) Any structure required by the State of Wisconsin codes.

(b) In all new structures over two stories in height .

(d) In any structure in which the AHJ deems standpipes are necessary for fire-fighting purposes.

(2) Temporary standpipes must be installed in an approved location for all of the following structures:

(a) All combustible structures exceeding two stories in height.

(b) All noncombustible structures exceeding three stories in height.

C. Installation requirements. Fire Department standpipes shall be designed and installed in accordance with this section. Where any requirement in this section is more restrictive than any NFPA standard and/or code and/or state code, the requirements in this section must be complied with.

(1) The installation of standpipes shall be in accordance with this section and NFPA 14.

(3) All standpipe systems hydraulic designs are to be based on a maximum of 90% of the available water supply (a minimum of a ten-percent safety margin shall be maintained). Pumping pressure at the FDC will not exceed 200 pounds and the system shall maintain 100 pounds of pressure at its most remote location.

(6) The location of standpipe hose connections shall be accessible and shall be located so that all portions of the building are within 100 feet of hose attached to a hose valve. This distance must be measured using the normal aisles or the path a hose would be laid as determined by the AHJ.

(7) The locations of all hose valves shall be acceptable to the AHJ

(8) The AHJ may require additional standpipes and/or hose valves to be installed.

(10) When required by the AHJ, an approved standpipe shall be installed as construction progresses to make them available for Fire Department use in the topmost floors constructed. Temporary standpipes shall be provided in place of permanent standpipes when required, during the period of construction on buildings required by this code.

(11) The location of all Fire Department connections for standpipes shall be approved by the AHJ.

(12) The Fire Department connections shall be located at least 40 feet from all electrical transformers, gas meters, or propane storage.

(13) Temporary standpipes are required on buildings over two stories in height.

(14) All standpipes are to be automatic standpipes unless a manual or dry standpipe is allowed by the AHJ.

§ 133-14. FIRE ALARM SYSTEMS.

B. Installation required. A fire alarm system shall be installed in all structures where the floor area exceeds the thresholds established in Table 133 -14 B of the specific occupancy type and construction type involved. All fire alarm system plans shall be designed and submitted by a person holding NICET Level II Certification or higher.

Table 133-14B

Occupancy Type	Type I	Type II	Type III	Type IV	Type V
E*	All	All	All	All	All
I-2	All	All	All	All	All
I-3	All	All	All	All	All
I-4	All	All	All	All	All
R-3	State Statutes apply				
R-4	All	All	All	All	All
S-1	3,000 SF	3,000 SF	3,000 SF	3,000 SF	3,000 SF
S-2	5,000 SF	5,000 SF	3,000 SF	3,000 SF	3,000 SF
U	5,000 SF	5,000 SF	3,000 SF	3,000 SF	3,000 SF

Note: *Excludes single-family-home day cares; state statutes apply.

C. Minimum system requirements. The following minimum system requirements shall be met when any occupancy type exceeds the limits in Table 133-14B. Minimum system requirements shall include:

- (1) Audible notification appliances shall be installed throughout protected premises.
- (2) Visible notification appliances shall be installed throughout protected premises.

Exceptions:

- (a) Closets and/or other similar small storage rooms that do not exceed 50 square feet in floor area and are not normally occupied.
 - (b) Normally unoccupied crawl spaces.
 - (c) Normally unoccupied attic spaces.
 - (d) Any nonaccessible area.
 - (e) Any area for which the AHJ deems Visible Notification Appliances are not required.
- (4) Manual initiating devices (pull stations) shall be located at all points of egress, including all exit doors on every floor and/or building level.
 - (6) Water flow detection devices shall be connected to the fire alarm system to specifically activate the notification appliances upon water flow.
 - (7) Fire suppression system activation alarms shall be connected to the protected premises' fire alarm system to specifically activate the notification appliances upon system activation. This includes but is not limited to wet chemical, CO₂, clean agent, water mist and d1y chemical systems.

(8) Fire control and/or suppression systems' supervisory condition indicators shall be connected to and monitored by the fire alarm system. This specifically includes but is not limited to: valve supervisory switches (tamper switches), low-air switches, low-water switches, low-temperature switches, fire pump condition indicators and/or any other situation or condition deemed necessary by the AHJ.

(9) Fire alarm systems shall be addressable and capable of indicating the status of all specific components connected to the system.

(10) All fire alarm systems shall be monitored by a service acceptable to the AHJ.

(11) Fire alarm annunciators shall be installed in all protected premises. The number and locations of the fire alarm annunciators installed shall be acceptable to the AHJ.

(12) As determined by the AHJ, any additional notification and/or initiation appliances/devices may be required due to size, occupancy hazards, building construction, and/or occupancy use.

F. Special requirements. On all buildings over four stories in height a fire command center for Fire Department operations shall be provided. The fire command center shall comply with NFPA 72 and shall contain the features required in the International Fire Code and NFPA 1, 13.7.2.5.2.2.

(1) Two-way telephone communication service shall be provided for Fire Department use. This system shall be in accordance with NFPA 72. The communications system shall operate between the central control station and every elevator car, every elevator lobby, and each floor level of exit stairs.

(2) The requirements of NFPA 1, 13.7.2.5.2.2(A) shall not apply where the Fire Department radio system is approved as an equivalent system. (NFPA 101, 11.8.3.2.)

(3) If the building components interfere with Fire Department radio operations, and if it is found within the first six months of the completion of the building, the owner is responsible for the cost of providing upgrades to ensure adequate radio communications throughout the building. The final system upgrade and operation must be approved by the Fire Chief or his designee.

L Fire alarm control panels shall display the status of the system components and be installed in a location acceptable to the AHJ. Adequate access for Fire Department alarm maintenance, and inspection personnel shall be maintained. Fire alarm control panels shall not be located within private dwellings with the exception of one- and two-family dwellings.

§ 133-15. AUTOMATIC FIRE PROTECTION FOR COOKING SYSTEMS.

B. Where required. Automatic fire extinguishing systems shall be installed in any cooking area required by the State of Wisconsin codes and any area in which the AHJ has determined a potential fire risk exists.

H. Roof spaces.

(1) All combustible roof spaces shall be subdivided every 3,000 square feet by one-hour rated partitions unless protected by a complete approved automatic fire sprinkler system.

(2) Any openings in the required one-hour rated partition must have a minimum of a one-hour rated self-closing door.

L. Fire sprinkler control valve access. All structures that have automatic sprinkler systems shall comply with the following:

- (1) Have sprinkler control rooms located with adequate access for Fire Department, sprinkler maintenance and inspection personnel.
- (2) Shall not be located within private dwellings with the exception of NFPA 13D systems.
- (3) Have direct access from the exterior to the sprinkler control valve(s) that is acceptable to the AHJ.

M. Fire pump rooms.

- (1) All fire pump rooms at grade level shall have a minimum of one single door access and egress directly to the outside of the structure.
- (2) All egress doors shall swing out from the fire pump.
- (3) A clear aisle of a minimum of 48 inches in width shall be provided for access to the fire pump which shall be totally accessible and have clearly labeled valves and controls capable of manipulation by a firefighter in full PPE including SCBA.
- (4) Keys for all doors to the fire pump room must be labeled and in the access box.

Germantown

5.09 - CODES ADOPTED AND INCORPORATED BY REFERENCE.

In addition to the regulations, standards and procedures set forth in this Code, the following are also adopted, incorporated herein and made a part of this Code by reference, subject to the subsection (2) below:

- (1) All orders, rules and regulations of the Department of Commerce set forth in the Wisconsin Administrative Code, and from time to time amended, are hereby adopted and incorporated herein by reference. The most current legislatively enacted versions will be enforced. This includes but is not limited to the Commercial Building Code, the Fire Prevention Code, the Electrical Code and all administrative codes not listed.
- (2) The Fire Prevention Code (National Fire Prevention Code 1) and all referenced standards are hereby adopted and incorporated herein by reference. The most current available printed version of all NFPA codes and standards shall be enforced.
- (3) The International Building Code and all associated documents are adopted by reference in their most current printed version.
- (4) In the event of conflict or ambiguity between the provisions adopted under this section, and the regulations, standards and procedures set forth elsewhere in this Code, the stricter provision shall apply. A copy of the above codes are on file in the office of the Fire Chief. (Please note that more stringent Village requirements apply.)

5.10 - AUTOMATIC SPRINKLER SYSTEMS.

(5) **BUILDINGS WHERE INSTALLATION REQUIRED.** Every building constructed or structurally altered shall have an approved automatic sprinkler system installed and maintained when occupied in whole or in part for the following purposes:

(d) *Hotels, Motels.* Throughout hotel and motel buildings of nonfire resistive construction.

(g) *Institutional Occupancies.* Throughout all hospitals; nursing, convalescent, old age and other institutional buildings; and community-based residential facilities.

(j) *Hazardous Occupancies.* Throughout every building which, by reason of its construction or highly combustible occupancy, involves a severe life hazard to its occupants, or, in the judgment of the Fire Chief, constitutes a fire menace.

(6) **EXCEPTIONS.** The following classes of buildings shall be exempt from the requirement of automatic sprinkler systems:

(a) Any portion of a building housing a process or material which would interact with water to create a greater fire hazard than without water, provided an alternate fire suppression system is used.

(7) **FIRE DEPARTMENT HOSE CONNECTIONS.** Every automatic sprinkler system installed in new or existing buildings shall be equipped with at least one Fire Department hose connection at a location approved by the Fire Chief.

(9) **INTERIM INSTALLATIONS.**

(a) Unless or until such time as a municipal water supply is available to serve a building in which installation of an automatic sprinkler is required, connection of the system to a water supply shall not be required; however, all design characteristics of systems installed under this section shall include provisions for eventual connection to a municipal water supply. In addition, such interim installations shall also include:

1. One or more Fire Department connections with 2 female couplings with National Standard Threads attached to a header of adequate size in accordance with fire protection engineering standards, but not less than 4 inches, to supply the system.
2. An automatic fire detection and alarm system of a type approved by the Fire Chief or his designee having jurisdiction.

(b) All fire sprinkler systems installed under the requirements of this section shall be connected to a municipal water system within 6 months after water mains to serve the building are available for use.

Glendale and North Shore

5.3.6 AUTOMATIC FIRE EXTINGUISHING EQUIPMENT REQUIRED FOR FOOD SERVING ESTABLISHMENTS.

(a) **Requirements.** Every kitchen operated and maintained to serve the public, including restaurants, clubs, school, churches, taverns, hospitals, nursing homes and all other places having equipment used for frying, cooking and similar preparation of food, operated and maintained for serving the public shall be subject to this Section. Such establishments shall have approved automatic fire extinguishing equipment, which is actuated, by fire. Such automatic fire extinguishing equipment shall be installed in all duct systems, grease removal devices, cooking stoves, and appliance hoods. All suppression systems shall be listed with

Underwriters Laboratories, Factory Mutual, or other recognized testing agency and shall conform to the requirements of NFPA 96. Installations of automatic fire extinguishing equipment shall require a permit to be issued by the Director of Inspection Services. Plans and specifications shall accompany each permit submittal and shall be reviewed and conditionally approved by the North Shore Fire Department. The North Shore Fire Department shall complete all field and acceptance testing.

(b) Time for Compliance of New and Existing Establishments. All new establishments, subject to this Section, shall comply therewith before the Director of Inspection Services grants a permit of occupancy. All existing establishments, subject to this Chapter, shall comply within six (6) months of the effective date hereof. The North Shore Fire Department shall, as soon as reasonably practicable after the effective date of this Chapter, notify every existing establishment subject to this Section of its duty to comply therewith. Any existing establishment shall have the right, within thirty (30) days after receiving notice from the North Shore Fire Department to comply, to appeal to the Board of Appeals for a variance from the terms and conditions of this Section. Such an appeal shall be made and governed by the provisions of law relating to appeals to the Board of Appeals.

(c) Type of Equipment and Installation Requirements.

(1) All equipment shall conform to NFPA #96, "Ventilation of Cooking Equipment." The equipment shall be either a "package unit" as listed in the Underwriters Laboratories, Inc., "Fire Protection Equipment List," for the extinguishment of fires in hoods, filters, and ducts used for ventilation of restaurant cooking equipment or a system individually designed ("engineered systems") to the applicable NFPA standard for the type of extinguishing equipment. A manual actuation control, which is accessible to kitchen personnel, shall be provided. The control shall be located near the hood not more than five (5) feet above the floor, readily accessible and not obstructed by cabinets or any other objects, permanent or temporary that would affect a persons ability to see the device. Instructions on operation of the manual control system shall be posted. A visual indicating device shall be provided and so located that at any time it can readily be determined if the systems extinguishing agent has discharged. An automatic fuel shut-off device shall be provided on all gas-fired appliances.

(2) A shut-off device is required for electric appliances especially electrically operated deep fat fryers.

(3) The installation shall conform to NFPA #96, "Ventilation of Cooking Equipment. "Package units" shall be installed in conformance with the limitations in the Underwriters' Laboratories, "Fire Protection Equipment List" as established by tests for the various unit sizes and nozzle arrangements. In the ventilating system all areas that are enclosed or partly enclosed shall be protected, including areas behind filters, ductwork, including in some cases fresh air intakes, and enclosed air intakes ahead of filters. All hood systems shall be engineered regardless of size.

(4) Cooking surfaces that are open or partly open shall be protected, including range tops, fat fryers, open broilers, griddles, etc. Fully enclosed devices, such as ovens, enclosed broilers, coffee urns, etc., do not require protection. At least one nozzle shall be installed for each fat fryer. Cylinders containing the extinguishing agent shall not be mounted in a concealed space. Cylinders shall be readily accessible for inspection and servicing.

(5) Protection of ducts shall be within the limitations of a single system; multiple systems cannot be used. Ducts, which exceed the limitation of a single system, must be protected by engineered systems or the ducts replaced with ducts, which are within "package systems" limitations. Where no hoods are installed and cooking protection is provided, detector links with heat deflectors shall

be located in the same relative position as if a hood was provided. One link shall be provided for each cooking appliance.

5.3.8 SPRINKLER REQUIREMENTS.

(a) Where Required. An approved automatic fire sprinkler system shall be installed and maintained per the requirements of the codes adopted herein. Where conflicts arise between this section and any other code section, the most restrictive requirements shall apply. Nothing in this section shall apply to one or two family dwellings.

5.3.9 FIRE ALARM SYSTEMS.

(a) General. Fire alarm systems shall mean any device designed to sense or alert persons to the possible presence of fire. A fire alarm system may include but is not limited to, smoke alarms, heat alarms, pull boxes, horns, and strobes and alarm panel. All fire alarm systems shall be installed per NFPA 72. All required alarm systems (required per NFPA 101 or the AHJ shall be monitored by a U. L. listed monitoring company.

(c) Specifications of Devices. Each detection device shall:

- (1) Cause the operation of an alarm shall be clearly audible in all rooms over any background noise levels with all intervening doors closed. Tests of the audibility level shall be conducted with all equipment, which would normally be running, in full operation.
- (2) Sounders shall have a minimum rating of eighty-five (85) dba or 15% above the ambient noise level. Strobes shall meet all light admittance requirements.
- (3) All devices used shall be part of a listed fire alarm system.

Grafton

Chapter 7.02 GENERAL PROVISIONS

7.02.020 APPLICATION TO NEW AND EXISTING CONDITIONS

The provisions of this title shall apply equally to new and existing conditions, except that existing conditions not in strict compliance with the terms of this title shall be permitted to continue where the exceptions do not constitute a distinct hazard to life or adjoining property.

7.32.030 REQUIRED WHERE.

Every building hereinafter constructed or structurally altered in any amount exceeding fifty percent of market valuation of such building shall have an approved automatic sprinkler system installed and maintained when occupied in whole or in part for the following purposes:

H. Hospitals and other Institutional Buildings. Throughout every building.

J. Public Buildings. Throughout building if over two stories in height or if over ten thousand square feet in area regardless of stories.

7.32.040 APPLICATION TO EXISTING BUILDINGS.

Where the chief of the fire department finds that by reason of construction or highly combustible occupancy, existing buildings constitute a severe fire hazard to its occupants or to adjoining property, the provisions of this chapter will apply.

7.32.090 EXEMPTED AREAS - SUBSTITUTION OF EQUIPMENT.

Nothing contained in this chapter shall be construed as to require the installation of sprinklers in safe deposit or other vaults, or in rooms or building devoted to the manufacture or storage of aluminum powder, calcium carbide phosphide, metallic and potassium, quicklime, magnesium powder, sodium peroxide or like materials where the application of water may cause or increase combustion, nor shall it be construed in any way to prohibit the substitution of other automatic protective equipment when approved by the fire department of the village.

Chapter 7.34 FIRE EXTINGUISHING EQUIPMENT

7.34.010 NUMBER, TYPE, AND LOCATION OF EXTINGUISHERS.

The chief of the fire department is empowered to designate the number, type and location of fire extinguishers as may be deemed necessary in addition to those now required by law in all existing buildings and structures and in all buildings and structures hereafter erected.

7.34.020 BUILDINGS WHERE FIRST AID STANDPIPES ARE NOT REQUIRED.

In buildings where first aid standpipes are not required, standard fire extinguishers shall be provided on each floor including the basement. Type, size, location and number of which shall be approved by the fire department.

7.34.030 ACCESSIBILITY - DISTRIBUTION.

Fire extinguishers shall be conspicuously located where they will always be readily accessible and so distributed as to be immediately available in the event of fire. They shall be hung on hangers or set in brackets according to NFPA No. 10.

Chapter 7.36 EQUIPMENT FOR FOOD SERVING ESTABLISHMENTS

7.36.010 INSTALLATION REQUIRED.

Every kitchen operated and maintained to serve the public, including restaurants, clubs, schools, churches, taverns, hospitals, nursing homes and all other places having equipment used for frying), cooking and similar preparation of food, operated and maintained for serving the public shall be subject to this title. Such establishments shall have approved automatic fire extinguishing equipment which is actuated by fire alone. Such automatic fire extinguishing equipment shall be installed in or over all duct systems, grease removal devices, cooking stoves and cooking appliance hoods by a factory authorized distributor in accordance with Underwriters' Laboratories, Inc. and Factory Mutual listings and shall conform to the requirements of the fire department; provided, however, that such automatic fire protection extinguishing equipment on duct systems may be omitted where all cooking equipment is served by listed and approved grease extraction devices. All applications for installation of automatic fire extinguishing equipment shall be submitted for review and approval by the fire department prior to installation. Two sets of plans and

specifications shall be submitted to the fire department for review. One set shall be retained by the fire department and the other returned to the installer and, if approved, shall be stamped "Approved by the Fire Department" with the date of such approval.

7.36.030 TYPE OF EQUIPMENT AND INSTALLATION REQUIREMENTS.

- A. All equi Laboratories, Inc., "Fire Protection Equipment List," for the extinguishment of fires in hoods, filters and ducts used for ventilation of restaurant cooking equipment, or a system individually designed ("engineered systems") to the applicable standards for the type of extinguishing equipment: NFPA No. 12, "Carbon Dioxide Extinguishing Systems," NFPA No. 15, "Water Spray Systems for Fire Protection," or NFPA No. 17, "Dry Chemical Extinguishing Systems."
- C. Package units shall be installed in conformance with the limitations in the Underwriters' Laboratories, Inc., "Fire Protection Equipment List" as established by tests for the various unit sizes and nozzle arrangements.
- D. All areas in the ventilating system that are enclosed or partly enclosed shall be protected, including areas behind filters, ductwork, including in some cases fresh air intakes, and enclosed air intakes ahead of filters. The size of the hood to be protected shall be the size of the plenum or area at the filters and not necessarily the overall dimensions of the hood. A hood with a plenum over three feet high will require an engineered system.
- E. Cooking surfaces that are open or partly open shall be protected, including range tops, fat fryers, open broilers, griddles, etc. Fully, enclosed devices, such as ovens, enclosed broilers, coffee urns, etc., do not require protection.
- F. At least one nozzle shall be installed for each fat fryer, unless the listing states otherwise.
- G. Cylinders containing the extinguishing agent shall not be mounted in a concealed space.
- H. Ready access for inspection and servicing shall be provided.
- I. Protection of ducts shall be within the limitations of a single system. Multiple systems cannot be used to protect ducts which exceed the limitations of a single system. Ducts which exceed the limitations of a "package system" must be protected by engineered systems (see NFPA Nos. 12, 13, 15, or 17) or the ducts replaced with ducts which are within "package systems" limitations. Where no hoods are installed and cooking protection is provided, detector links with heat deflectors shall be located in the same relative position as if a hood was provided. One link shall be provided for each cooking appliance.

Chapter 7.38 FIRE STOP AND FIREWALL REQUIREMENTS

7.38.010 INSTALLATION REQUIRED WHEN - EXCEPTIONS.

- A. Fire stops with two-hour resistance rating shall be installed as follows:
2. Maximum distance between fire stops on any false mansard roof shall not exceed thirty feet.

B. The requirements of subsection (A) of this section shall not be required when the building and mansard are constructed of noncombustible materials.

Chapter 7.40 SMOKE AND HEAT VENTING

7.40.010 AUTOMATIC FIRE VENTING.

Approved automatic fire venting shall be installed, inspected and maintained as per NFPA Code No. 204 as follows: In buildings used for manufacture or sale of combustible goods or merchandise ten thousand square feet or more in area.

7.40.020 CURTAIN BOARDS.

Approved curtain boards shall be installed as follows: In buildings used for manufacture or sale of combustible goods or merchandise forty thousand square feet or more in area.

Chapter 16.04 BUILDING CODE

16.04.010 DOCUMENT ADOPTED.

The Wisconsin Uniform Building Code has been adopted by the village, and copies of this code are attached to Ordinance A-358-78, on file in the village clerk-treasurer's office.

16.04.015 AMENDMENTS ADOPTED.

A. Future amendments to the Wisconsin Uniform Building Code are adopted and shall become a part of this code.

Grand Chute

§ 291-3. ADOPTION OF STATE AND NATIONAL CODES.

A. Codes adopted; enforcement.

(1) The Wisconsin state codes listed in this section are hereby adopted by reference and made a part of the Town of Grand Chute Fire Prevention Code. For the purposes of this section, these provisions are adopted to enable the Fire Department to note any violations of such codes and to report those violations to the appropriate community service inspectors. The Fire Inspectors shall have the authority to cite such violations on fire inspections.

- (a) Fire Prevention, Wisconsin Administrative Code.
- (b) Buildings Constructed Prior to 1914, Wisconsin Administrative Code.
- (c) Wisconsin State Electrical Code, Wisconsin Administrative Code.
- (d) Wisconsin Commercial Building Code, Wisconsin Administrative Code.
- (e) Elevators, Wisconsin Administrative Code.
- (f) Flammable and Combustible Liquids, Wisconsin Administrative Code.

B. The International Fire Code 2009 Edition, hereinafter "IFC," is hereby adopted as though fully set forth herein, with the following exceptions:

(1) Sections 105 and 108 of Chapter 1, Administration, of the IFC are not included as part of the adoption of the IFC.

(2) Chapter 34, Flammable and Combustible Liquids, is not included as part of the adoption of the IFC. This chapter is covered by Ch. Comm 10, Wis. Adm. Code.

Editor's Note: See now Ch. SPS310, Wis. Adm. Code.

(3) Section 307 of Chapter 3, General Requirements, of the IFC is not included as part of the adoption of the IFC. This section is covered by § 291-5 of this chapter.

(4) Section 60.8 of Chapter 6, Building Services and Systems, is not included as part of the adoption of the IFC. This section is covered by § 291-5 of this chapter.

C. The editions of the National Fire Protection Association (NFPA) codes and standards are adopted by reference in Chapter 47 of the IFC and, along with Appendices B through G and I, are made a part of the Town of Grand Chute Fire Prevention Code with the same force and effect as though set forth herein in full.

D. Any fire prevention problem not herein addressed by code or adopted standards will be addressed on the basis of current accepted National Fire Prevention Association standards.

E. Conflicting provisions. Whenever any of the provisions of the codes enumerated in Subsections A, B, and C conflict, the strictest provisions shall apply.

Greenfield

18.12 - AUTOMATIC FIRE SPRINKLER PROTECTION.

(2) *Installation required.* An automatic fire sprinkler system shall be installed in all structures where the floor area exceeds the thresholds established in Table 18.12(2) of the specific occupancy involved. For the purpose of determining square footage as it relates to the sprinklering of a building, firewalls shall not be considered area dividers unless the firewall is built in compliance with Section 705 of the CBC.

Table 18.12(2)

Occupancy

Type	Type I	Type II	Type III	Type IV	Type V
E*	All	All	All	All	All
F2	5,000 SF	5,000 SF	3,000 SF	3,000SF	3,000 SF
I-2	All	All	All	All	All
I-3	All	All	All	All	All
I-4	All	All	All	All	All
R-4	All	All	All	All	All
U	5,000 SF	5,000 SF	3,000 SF	3,000 SF	3,000 SF

18.14 - MISCELLANEOUS CONSTRUCTION PROVISIONS.

(4) *Fire alarm systems.*

(b) *Installation required.* A fire alarm system shall be installed in all structures where the floor area exceeds the thresholds established in Table 18.14(4)(b) of the specific occupancy involved.

Table 18.14(4)(b)

Occupancy

Type	Type I	Type II	Type III	Type IV	Type V
E*	All	All	All	All	All
I-2	All	All	All	All	All
I-3	All	All	All	All	All
I-4	All	All	All	All	All
R-2	All	All	All	All	All
R-4	All	All	All	All	All
S-1	3,000 SF	3,000 SF	3,000 SF	3,000 SF	3,000 SF
S-2	5,000 SF	5,000 SF	3,000 SF	3,000 SF	3,000 SF
U	5,000 SF	5,000 SF	3,000 SF	3,000 SF	3,000 SF

Hales Corners

6.08 AUTOMATIC FIRE SPRINKLER PROTECTION.

(2) Installation Required. Except as provided in subsections (a) and (b) herein, an Automatic Fire Sprinkler System shall be installed in all structures where the floor area exceeds the thresholds, reduced by twenty-five percent (25%), as established in COMM 62.0503 and COMM 62.0903.

(b) Residential Group R Occupancies. An Automatic Sprinkler System shall be installed in any building classified as a Residential Group R Occupancy as required by COMM 62.903.

(3) When a sprinkler system is required by this chapter, but not the Wisconsin Department of Commerce, at a structure that is not currently serviced by a municipal water source:

(b) Within ninety (90) days after a municipal water system becomes available, the sprinkler system shall be connected to the municipal water supply.

(4) All automatic fire sprinkler systems shall:

(a) Be monitored in accordance with NFPA 72.

(b) Have sprinkler control rooms located with adequate access for Fire Department, Sprinkler Maintenance and Inspection personnel and shall not be located within private dwellings with the exception of NFPA 13D systems.

(c) Have direct access from the exterior to the sprinkler control valve as determined by the AHJ.

(e) Have a bell (minimum ten inch) and Strobe located above the FDC in accordance with NFPA 13, 13R and/or 13D.

(f) The FDC must be at least forty (40) feet from all gas meters, electrical meters and transformers.

(g) Be designed for the hazard being protected or as specified in this Code and/or as directed by the AHJ.

(h) All automatic fire sprinkler systems hydraulic designs are to be based on ninety percent (90%) available water supply (10% safety margin shall be maintained). All sprinkler systems designed shall be based on the most current approved water flow test conducted in accordance with NFPA 291.

(6) Application to Existing Buildings.

(a) Where the AHJ finds that an existing building, because of current occupancy or a change in occupancy constitutes a hazard to its occupants or adjoining property, the AHJ may order compliance with the provisions of this section. A hazard shall be determined by the existence of one or more of the following conditions:

1. Any building which by reason of its construction or highly combustible occupancy involves a severe life hazard to its occupants or, in the judgment of the AHJ, constitutes a fire menace, including, but not limited to, paint shop and other occupancies involving processing, mixing, storing, and dispensing of volatile liquids or solids.
2. Non-fire-resistive characteristics of a structure.
3. Accumulation of flammable or combustible materials.
4. Lack of accessibility to the premises for fire-fighting equipment.
5. Substantial number of fire calls or complaints on the premises.
6. Traffic patterns for pedestrian ingress and egress which require protection under this section.
7. Insufficient ventilation system.
8. Lack of an internal communication system, or due to the size or type of building making regular Fire Department radio communication inoperable.
9. Number, characteristics and movement of employees which require protection under this section

b) The building owner may be required to install a repeater system or something comparable to assist radio communications.

(7) Fire Sprinkler Control Valve Access

(a) All structures that have automatic sprinkler systems shall comply with the following:

1. Have direct access from the exterior to the sprinkler control valves that is acceptable to the AHJ.
2. Shall not be located within private dwellings with the exception of NFPA 13D systems.
3. Have sprinkler control rooms located with adequate access for Fire Department, sprinkler maintenance and inspection personnel.

(8) Exemptions. Any location where the installation of sprinklers may cause or increase an occupational hazard as determined by any governmental authority having jurisdiction over such location or occupation.

6.09 AUTOMATIC FIRE PROTECTION FOR COOKING AREAS.

(2) Installation Requirements

(b) The system shall be provided with automatic fuel shut-off.

(c) A Class K fire extinguisher shall be installed per NFPA 10.

(d) Alarms shall be connected to the fire alarm system per NFPA 72.

(e) Cooking equipment used in processes producing smoke, or grease-laden vapors shall be equipped with an exhaust system that complies with all the equipment and performance requirements of NFPA 1 and NFPA 96, and all such equipment and performance shall be maintained per NFPA 96 during all periods of operation of the cooking equipment.

6.10 MISCELLANEOUS CONSTRUCTION PROVISIONS.

(4) Fire Alarm Systems.

(b) Installation Required.

1. Business Group B Occupancies. A Fire Alarm and Detection System shall be installed in any building classified as a Business Group B Occupancy.
2. Residential Group R Occupancies. A Fire Alarm and Detection System shall be installed in any building classified as a Residential Group R Occupancy as required by COMM 62.0907.

(d) Minimum System Requirements. The following minimum system requirements shall be met when any occupancy type exceeds the limits in §6.10(4)(b) of this Code. Minimum system requirements shall include:

1. Audible notification appliances shall be installed throughout protected premises.
2. Visible notification appliances shall be installed throughout protected premises and on the exterior at the main entrance. Exceptions:
 - a. Closets and/or other similar small storage rooms that do not exceed 50 square feet in floor area and are not normally occupied.
 - b. Normally unoccupied crawl spaces.
 - c. Normally unoccupied attic spaces.
 - d. Any non-accessible area.
4. Manual Initiating Devices (pull stations) shall be located at all points of egress including all exit doors on every floor and/or building level. Exceptions: Manual initiating devices are not required in buildings that have complete automatic fire sprinkler systems installed in accordance with NFPA 13.
5. Water flow detection devices shall be connected to the protected premises fire alarm system to specifically activate the notification appliances upon water flow.
6. Fire suppression system activation alarms shall be connected to the protected premises fire alarm system to specifically activate the notification appliances upon system activation. This includes but is not limited to Wet Chemical, CO₂, Clean Agent, Water Mist and Dry Chemical Systems.
7. Fire control and/or suppression systems supervisory condition indicators shall be connected to and monitored by the protected premise fire alarm system. This specifically includes but is not limited to: Valve Supervisory Switches (Tamper Switches), Low Air Switches, Low Water Switches, Low Temperature Switches, Fire Pump Condition Indicators and/or any other situation or condition deemed necessary by the A.HJ.

8. Fire Alarm Systems shall be addressable and capable of indicating the status of all specific components connected to the system.

9. All Fire Alarm Systems shall be monitored by a service acceptable to the AHJ.

10. Fire alarm annunciators shall be installed in all protected premises. The number and locations of the fire alarm annunciators installed shall be acceptable to the AHJ.

11. As determined by the AHJ, any additional notification and/or initiation appliances/devices may be required due to size, occupancy hazards, building construction, and/or occupancy use.

(g) Special Requirements. On all buildings over four stories in height a Fire Command Center for Fire Department operations shall be provided. The Fire Command center shall comply with NFPA 72 and shall contain the features required in the International Fire Code and NFPA 1, 13.7.2.27.2.2.

1. Two-way telephone communication service shall be provided for the Fire Department use. This system shall be in accordance with NFPA 72. The communications system shall operate between the central control station and every elevator car, every elevator lobby, and each floor level of exit stairs.

2. The requirements of NFPA I, 13.7.2.27.2.2(A) shall not apply where the Fire Department radio system is approved as an equivalent system. (NFPA I 0 I, 11.8.3.2.)

(11) Standpipes. Fire Department Standpipes shall be provided in all new structures over two stories in height and in accordance with this section. The installation of standpipes shall be in accordance with this Section and NFPA 14.

(b) The location of standpipe connections shall be accessible and shall be located so that all portions of the building are within thirty (30) feet of a nozzle attached to one hundred (100) feet of hose.

(c) When required by the AHJ, an approved standpipe shall be installed as construction progresses to make them available for Fire Department use in the top most floors constructed. Temporary standpipes shall be provided in place of permanent standpipes during the period of construction on buildings over three stories in height.

(d) The Fire Department Connections for the standpipe shall be approved by the AHJ.

(e) The Fire Department Connections shall be located at least forty (40) feet from all electrical transformers, gas meters, or propane storage.

(f) Temporarily standpipes are required on buildings over three stories in height.

(17) Fire Pump Room Requirements

(a) All fire pump rooms at grade level must have at least one single door access and egress directly to the outside.

(b) All egress doors must swing out from the fire pump.

(c) Must have an accessible aisle, a minimum of a 48 inches (48") wide, leading to the fire pump.

(d) Must provide accessible and clearly labeled valves and controls must be provided capable of being manipulated by a firefighter in full PPE including SCBA.

(e) Keys for all doors to the fire pump room must be labeled and in the access box.

Jackson

3.26 FIRE HYDRANTS / SYSTEMS REQUIREMENTS ON PRIVATE PROPERTY.

B. FIRE HYDRANTS. STANDPIPES AND SPRINKLER SYSTEMS ON PRIVATE PROPERTY.

4. The fire department connection for the sprinkler system shall be a 30-degree, five (5) inch storz; the connection point shall be between three feet and four feet above the finished property grade.
5. A horn/strobe combination alarm-signaling device shall be located above the fire department connection inside and outside of the building. This device shall be used as the water flow alarm apparatus.
6. The hose connection for the Class 1 standpipe system shall be a two and one-half inch diameter. The connection point shall be between three feet and four feet above the finished property grade.

3.29 FIRE SUPPRESSION.

B. GENERAL.

1. Approved automatic fire sprinkler systems shall be installed where required by the current adopted Wisconsin Administrative Code and Regulations of the Department of Commerce.
3. The Fire Chief or their authorized representative may deem by reason of construction or highly combustible occupancy, that if an existing building constitutes a severe fire hazard for its occupants or to adjoining property, the provisions of this section will apply.
4. Any additional square footage added to a sprinkler structure will require the installation of a horn/strobe combination alarm signaling device, the device shall be located above the fire department connection inside and outside of the building. This device shall be used in place of the water flow alarm apparatus. A 30-degree, five (5) storz connection shall be installed as the fire department connection. The connection point shall be between three feet and four feet above the finished property grade.
8. The Fire Department connection shall be located within 150 feet of a hydrant.

3.30 FIRE ALARM AND DETECTION SYSTEMS.

A. GENERAL.

1. Approved Fire Alarm and Detection Systems shall be installed where required by the current adopted Wisconsin Administrative Code and Regulations of the Department of Commerce.
3. The Fire Chief or authorized representative shall determine the type of coverage needed (complete, partial or selective) by the use and occupancy classification of the building. The Jackson Fire Department requires at a minimum, a fire alarm notification system consisting of pull stations and horn/strobe notification devices. This is to include buildings with any type of suppression system(s). The number of pull stations and notification devices shall be determined by the Jackson Fire Department per the use and occupancy classification of the building. All fire alarm/detection systems shall be installed per NFPA Codes.

4. The requirements for this section shall be effective for all new buildings and shall follow the requirements of the current adopted Wisconsin Administrative Codes and Regulations and with the current adopted National Fire Protection Association Codes and Standards.
5. Any additional square footage added to an existing structure will require the installation of a Fire Alarm and Detection System.
6. The Fire Chief or their authorized representative may deem by reason of construction or highly combustible occupancy, that if an existing building constitutes a severe fire hazard to its occupants or to the adjoining property, the provisions of this section will apply.

D. FUNCTIONING.

1. The system shall function as follows when any detector operates.
2. A horn/strobe combination alarm-signaling device shall be installed on the outside of the structure, if the owner/representative elects not to have the Fire Alarm and Detection System monitored by a Central Alarm System.
3. The Fire Chief or designee shall approve the location of the annunciation panel; the proper zone and fire indication will appear on the annunciation panel.
4. The main and remote alarm devices, including the public alarm system, will sound, inside and outside of the building. A visual type signal will be shown outside of the building.

Kenosha

3.16 FIRE EXTINGUISHING EQUIPMENT

D. Fire Alarm, Detection and Extinguishing Systems.

1. Internal local fire alarm or detection systems shall be required in schools, public and private, colleges and universities, hospitals, institutions, jails, nursing, convalescent and retirement homes, and other occupancies with one hundred (100) or more sleeping accommodations or any building which has eight (8) or more separate residential occupancies. Said internal fire alarm or detection system in each of the aforesaid classes of buildings, except apartment houses, shall be connected to a private, twenty-four (24) hour supervised alarm company.
2. Every establishment preparing and serving food, except private residences, shall have automatic fire extinguishing protection built into any new or modified hood and/or exhaust system as part of any cooking equipment which has an open flame or an electric element that could cause ignition or contact with, or exposure to, grease or inflammable materials.

3.23 AUTOMATIC FIRE SPRINKLER SYSTEMS

C. Wisconsin Administrative Code. The provisions of the Wisconsin Administrative Code regulating Automatic Fire Sprinkler Systems and Fire Safety are hereby adopted and incorporated herein by reference as it now exists and as it may be amended in the future.

D. Installation and Maintenance Required.

1. Requirement. Every building constructed, structurally altered, or has a change of occupancy, where required, shall have an approved Automatic Fire Sprinkler System installed and maintained

when occupied, in whole or in part, for the following purposes in the following building groups (which building groups are defined in the International Building Code):

- c. Educational Group E. An approved sprinkler system shall be installed and maintained throughout all educational occupancies and any type of daycare setting, except in-home daycare.
- e. Hazard Group H. An approved sprinkler system shall be installed and maintained throughout all Group H occupancies.
- f. Institutional Group I and Residential Group R-4. An approved sprinkler system shall be installed and maintained throughout all Group I and Group R-4 Occupancies.
- h. Utility and Miscellaneous Group U. Group U covers all buildings and structures not covered in any other occupancy classification. Sprinkler system requirements for Group U buildings and structures will be reviewed by the Fire Chief on a case-by-case basis.

2. Exception to the Installation Requirement. Unless otherwise required by state law, any building that has a U.L. - approved smoke detection system that includes a monitored, central-station fire alarm panel, which system has been approved by the Fire Chief for the building in which it is installed, that completely satisfies any of the following is excepted from the installation requirement of paragraph D. 1.

- a. An existing building.
- b. A building that is constructed pursuant to a developer's agreement approved by the Common Council before the effective date of this ordinance and is first occupied no later than July 1, 2013. The exception of this paragraph D.2 does not apply to the maintenance requirement for a sprinkler system that is already installed.

E. Exceptions. Provided that an alternate fire suppression system approved by the Bureau is in use, any portion of a building housing a process or material which would interact with water to create a greater fire hazard than without water, may be exempt from the requirement of Automatic Fire Sprinkler System.

F. Water Supply System. The water service line providing water to an Automatic Fire Sprinkler System may be connected to the general water service lateral, or may be a separate lateral, providing however, that if connected to the general water service lateral, the line must be separated and valved before the water meter which measures the domestic water supply. The size, location and metering of the required water supply line must be authorized and approved by the Kenosha Water Utility in accordance with the Rules and Regulations governing water service in the City of Kenosha. The owner of any premise requiring Automatic Fire Sprinkler Service is required to pay for the full cost of installing a new or separate fire service water supply line in addition to all necessary valves, fittings and meter settings required to provide such service; and shall further be required to sign a contract for a water supply line service connection with the City of Kenosha Water Utility.

G. Fire Department Connections.

1. Requirements. Every Automatic Fire Sprinkler System shall have the following:

- b. A Fire Department Connection. The Fire Department Connection shall be operationally connected to the Automatic Fire Sprinkler System. The Fire Department Connection shall have a Siamese connection with two and one-half (2.5") inch national standard threads, and

a five (5") inch Storz connection. The Fire Department Connection shall be located to comply with all of the following: no further than five (5') feet from the pumper pad; no further than five (5') feet from a fire hydrant; and no closer to the building it services than the height of the building that it services. There may not be any obstruction between the fire hydrant and the Fire Department Connection that would impede a firefighters access to the Fire Department Connection, or that would inhibit the operation of a hose extending from the fire hydrant to the Fire Department Connection. There may not be any obstruction between the pumper pad and the Fire Department Connection that would impede a firefighter's access to the Fire Department Connection, or that would inhibit the operation of a hose extending from the pumper pad to the Fire Department Connection.

I. Installation Standards.

1. NFPA Standards. Approved Automatic Fire Sprinkler System equipment shall be installed in accordance with one (1) or more of the following NFPA standards as the Fire Chief may determine are applicable:

- a. NFPA #13, "Standards for the Installation of Sprinkler Systems".
- b. NFPA #13D, "Sprinkler Systems - One and Two-Family Dwellings".
- c. NFPA #13R, "Sprinkler Systems in Residential Occupancies Up To and Including Four Stories in Height".
- d. NFPA #231, "General Storage".
- e. Such other NFPA standards as the Fire Chief may determine are applicable.

3. Outdoor Rated Horn/Strobe Notifier. An outdoor rated horn/strobe notifier with an excess of 100 candle power shall be installed in lieu of the required bell. The normal placement is above the Fire Department connection, but shall be approved by the Fire Chief.

4. Water Flow Monitoring. All Automatic Fire Sprinkler Systems shall be monitored for water flow by a central or remote station pursuant to the current version of NFPA 72.

3.24 FIRE DEPARTMENT STANDPIPES

A. Class Three Standpipe. A Class Three Standpipe will be installed in all buildings meeting one (1) or more of the following:

1. Any building of three (3) stories or more.
2. Any building having occupancy of one hundred (100) or more.
3. Any building with one floor of seven thousand five hundred (7,500) square feet or more in area.
4. Any building over one story in height and six thousand (6,000) square feet or more in area on a floor.

B. Approved Devices/Materials. All devices and materials used in standpipe systems shall be of approved type.

C. Other Standards and Specifications. All other standards and specifications will be taken from the current edition of NFPA Pamphlet #14, "Standards for the Installation of Standpipe and Hose Systems".

The installation of a Automatic Fire Sprinkler System will not supersede the requirements for the installation of Fire Department standpipes.

D. Parking Structures. Any parking structure built whether aboveground or below ground will have a standpipe system approved by the Bureau prior to installation.

3.25 FIRE ALARMS

A. General. "Fire Alarm Systems" shall mean any device designed to sense or alert persons to the possible presence of fire. A Fire Alarm System may include, but is not limited to, smoke alarms, heat alarms, pullboxes, horns, and strobes and alarm panels. All Fire Alarm Systems shall be installed per NFPA 72. All required alarm systems (required per NFPA 101 or the orders of the Kenosha Fire Department shall be monitored by an Underwriters' Laboratory listed monitoring company.

3.28 PERMANENT ROOF ANCHORAGE REQUIRED

Responsible parties for any building which is over three (3) stories shall install and maintain anchorages on the roof of each such building in a number and manner to provide firefighting connection to allow for access to each point of potential emergency rescue, including, but not limited to, all windows, platforms, and all other points of emergency egress, which points of potential emergency rescue are located above the second story above a location that a ladder fire truck could reasonably be positioned. Anchorages required herein shall be of a type used for attachment of personal fall arrest equipment and capable of supporting at least five thousand (5,000 lbs.) Pounds (22.2 kN), and shall be approved by the Fire Department in advance of installation. Anchorages shall be inspected annually and after each use.

3.29 HOOD SYSTEMS AND DUCT-FIRE EXTINGUISHER SYSTEM

B. Requirement. All commercial kitchens and all industrial kitchens shall have at least one (1) adequate hood system and at least one (1) duct fire extinguishment system.

C. Hood System. All hood systems installed or maintained pursuant to this Section must be approved by the Underwriters' Laboratories, must conform to the requirements of NFPA 96 and be approved by the Bureau.

D. Duct-Fire Extinguishment System. All duct-fire extinguishment systems installed or maintained pursuant to this Section must conform to the requirements of NFPA 96 and be approved by the Bureau.

La Crosse

3.13 FIRE MARSHALL.

(C) APPLICATION OF NEW AND EXISTING CONDITIONS. The provisions of this Code shall apply equally to new and existing conditions except that existing conditions not in strict compliance with the terms of this Code shall be permitted to continue where the exceptions do not constitute a distinct hazard to adjoining property.

(E) REGULATIONS OF WISCONSIN ADMINISTRATIVE CODE AND NATIONAL FIRE PROTECTION ASSOCIATION FIRE PREVENTION CODE.

(2) The provisions of NFPA 1, Fire Code, 2012 Edition, and the referenced publications of Chapter 2 of NFPA 1, 2012 Edition, contained in the National Fire Protection Association Fire Code and all amendments thereto are hereby adopted by reference and the rules and regulations contained

therein are hereby made a part of this ordinance as though they were fully set forth herein with the following amendments:

- (a) NFPA 1:1.10 shall not be included as part of this adoption;
- (b) NFPA 1:1.12.8 substitute permits required by Municipal Code;
- (c) NFPA 1:3.3.127 shall be substituted by the State of Wisconsin definition of fireworks as stated in § 167.01(1);
- (d) NFPA 1:3.3.127.1 shall be substituted by the State of Wisconsin §167.10
- (e) NFPA 1:3.3.127.2 shall be substituted by the State of Wisconsin §127.10;
- (f) NFPA 1: Chapter 6 shall be substituted by the International Building Code 2009 edition Chapter 3 “Use and Occupancy Classification.”
- (g) NFPA 1:10.11.4 shall be substituted by Municipal Code 7.01(D);
- (h) NFPA 1:10.16 addition of Municipal Code 8.01(K)(5)(d)ix) and 8.01(K)(5)(d)(v).
- (i) NFPA 1:11.3.6 through 11.3.6.5.1.7 shall not be included as part of this adoption;
- (j) NFPA 1:13.3.2.10.1 shall not be included as part of this adoption
- (k) NFPA 1:13.3.2.20 through 13.3.2.20.2 shall not be included in this adoption.
- (l) NFPA 1:13.7.1.5 shall be replaced with Wisconsin SPF 328.04; and
- (m) NFPA 1:20.11 through 20.11.5 shall not be included in this adoption.

20.15 FIRE ALARM SYSTEMS.

(D) ALARM SYSTEM STANDARDS AND REGULATIONS.

(2) Automatic Dialing Devices. No person shall interconnect any automatic dialing device to 9-1-1 LEDC. Such devices may be interconnected to a modified Central Station or Remote Station or an Answering Service.

(4) The provision of the National Fire Protection Association Fire Codes 1983, Volume 7 - Pamphlets 71 through 72E and all amendments thereto are hereby adopted by reference and the Rules and Regulations contained therein are made a part of this ordinance as though they were fully set forth herein. A current copy of the National Fire Protection Code containing the sections herein enumerated and all amendments hereto, shall be kept of file in the office of the Fire Chief.

(J) EXEMPTIONS.

The provisions of this Ordinance are not applicable to fire, heat, smoke and water flow alarms such as residential alarms and proprietary alarms which do not emit a visual or audible signal, directly or indirectly, beyond the interior of the building in which they are installed. The provisions of this ordinance are not applicable to authorized connections under Subsection (D)(4) herein.

Lake Geneva

ARTICLE II. AUTOMATIC SPRINKLER SYSTEMS

Sec. 30-32. Buildings requiring installation.

(a) This article requires the installation of an automatic fire sprinkler system in the following buildings:

(2) Industrial;

(3) Government buildings;

(b) A complete approved automatic fire sprinkler protection system shall be provided in all the buildings listed in subsection (a) of this section, except multifamily, as follows:

(1) Fire-resistive buildings. Throughout every building which is either:

a Ten thousand square feet or more in total area;

b. Is over one story in height and exceeds 6,000 square feet in total area; or

c. Is over two stories in height.

(2) Nonfire-resistive buildings. Throughout every building which is either:

a Five thousand square feet or more in total area; or

b. Is over two stories in height.

Sec. 30-33. Accessory buildings and special principal building areas.

Approved automatic sprinkler equipment shall be installed and maintained in the following accessory buildings and special principal building areas as follows:

(1) Garages. Automatic sprinkler equipment shall be installed in garages as follows:

a. Garages within, attached to above or below other occupancies.

b. Garages used as passenger terminals.

(2) Basements and subbasements. In the basements and subbasements of principal and accessory buildings approved automatic sprinkler equipment shall be installed as follows:

b. All subbasements regardless of size.

(4) Daycare centers, including adult day care centers. All buildings in day care centers and adult day care centers, regardless of size, shall have complete sprinkler protection throughout.

(5) Community based residential facilities (CBRF). All buildings in community based residential facilities (CBRF), regardless of size, shall have sprinkler protection throughout.

(6) Theaters and assembly buildings. All buildings in theaters and assembly buildings, regardless of size, shall have sprinkler protection throughout.

(7) Hospitals, nursing, convalescent, old age and other similar Institutional buildings. All buildings of nonfire-resistive construction in hospitals, nursing, convalescent, old age and other similar institutional buildings, regardless of size, shall have sprinkler protection throughout.

(8) Schools, colleges and universities. All buildings of nonfire-resistive construction in schools, colleges and universities, regardless of size, shall have sprinkler protection throughout.

(9) Dormitories, fraternities and sorority houses. All buildings in dormitories, fraternities and sorority houses, regardless of size, shall have sprinkler protection throughout.

(10) Hotels, motels and roominghouses. All buildings of nonfire-resistive construction in hotels, motels and roominghouses, regardless of size, shall have sprinkler protection throughout.

(11) Commercial, industrial and institutional garages and service centers. Any building with a total area of 3,000 square feet in area or greater in commercial, industrial and institutional garages and service centers, regardless of size, shall have sprinkler protection throughout.

Sec. 30-34. High-hazard occupancies.

(a) Approved automatic fire suppression equipment shall be installed and maintained in the following buildings, regardless of size, in which it is expected there will be high-hazard occupancy, including, but not limited to:

(1) Aircraft hangars.

(2) Dry cleaning establishments using or storing gasoline or other volatile flammable liquids.

(3) Enameling or Japanning operations.

(4) Mills: sugar, starch, cereal, feed, hay flour and grist mills.

(5) Paint and varnish: Manufacturing, storing, handling, spraying, and other related operations.

(6) Paint stripping establishments.

(7) Manufacture and storage of Pyroxylin products.

(8) Smoke houses.

(9) Storage of explosive gases under pressure (15 psi and over 5,400 cubic feet) such as acetylene, hydrogen and natural gas.

(10) Storage of materials with a flashpoint under 200° F., such as celluloid products, kerosene, etc.

(11) Woodworking and other such establishments with combustible dust.

(12) Chemical works and for storage facilities.

(13) Explosive and pyrotechnics manufacturing.

(14) Oil refineries.

(b) This article applies to all new construction after the effective date of the ordinance from which this section is derived.

Sec. 30-42. Additions or change of use.

All existing public, commercial and industrial buildings 6,000 square feet or more in size, exterior wall dimensions, shall conform to this article. If life occupancy is present in any such structure, this article will apply regardless of size as follows:

(1) Application of article. This article applies to, but is not limited to, places of employment, schools and municipal, state and federal government structures.

(4) Incremental additions. In the event of incremental periodic additions to an existing structure any such additions from the effective date of the ordinance from which this article is derived shall be added together (gross area) and when any such additions total at least 253 of the gross area of the original structure this article and its requirements shall apply to all additions added from the effective date of this ordinance from which this article is derived.

(5) Change of use. If the use of an existing public, commercial or industrial building is changed to any new use the building shall be made to comply with this article. Hotels, motels and other similar buildings, if converted to condominiums or other private ownership, shall be made to comply with the requirements of this article.

ARTICLE V. FIRE ALARM SYSTEMS

Sec. 30-119. Applicability.

These requirements of this article shall apply to all new buildings within the inspection boundaries of the city *fire* department.

(1) New buildings should comply with the requirement of this article before the building is occupied or used for any purpose other than its construction.

(2) False alarms provisions shall apply to both new and existing structures.

(3) All cost associated with the installation, operation, transmission, and maintenance of automatic fire alarm systems shall be borne by the building owner and/or occupant.

Sec. 30-120. Amendments.

The codes adopted in section 30-118 of this article are hereby amended as follows:

(1) Transmission of alarm signals:

a All alarm signals emanating from automatic fire alarm systems shall transmit by dedicated circuit.

b. Non-required systems may transmit clear signals via digital communicator with a daily test signal or other means to a UL listed central station. All alarm signals received by the central station must be relayed to the city fire department alarm center via public switched telephone network at (414) 248-4434 or at said number as established from time to time. A copy of the current UL listing for central station alarm receiving locations shall be on file at the city fire department Alarm installation company shall provide for current UL listing for central stations. Note: After September 25. 1999, the area code will change to (262).

c. Systems that transmit alarm via recorder or digital voices shall be prohibited. No fire alarm system shall be programmed to directly dial 911 or other emergency and/or non-emergency number of the city fire department

(4) Zoning of fire alarm systems: Shall be, per NFPA 72, 1-5-7.

(5) Additional specific system requirements:

a. All fire alarm control panels shall be capable of silencing the audio notification signal without re-setting the panel. The silencing switch shall be a single switch requiring no keys,

access codes or special knowledge. The re-set switch shall be a single switch requiring no keys, access codes or special knowledge. A key may be used to actuate a remote annunciator panel to silence a system.

c. All smoke detectors should have indicating lights that illuminate when the detector activates. When smoke detectors are installed in any location not visible from the floor area, remote indicating lights shall be provided in a location approved by the city fire department.

d. The installation of safety guards over alarm initiating devices may be required when such devices are subject to damage or frequent malicious activation.

e. All sprinkler system control valves and associated control functions shall be equipped with electric supervision including pump power, pump run and room temperature etc. Supervised functions shall transmit a separate and distinct supervisory alarm. said alarm should automatically restore when the supervised function is restored to the normal position and indicates restoration at the remote alarm monitoring station.

f. Alarm system indicating panels shall be placed so that fire fighting personnel do not have to pass through or into the structure any further than the main entrance to view or operate the alarm panel.

(6) Vacant buildings. The alarm system shall remain in operation at all times.

Lannon

Sec. 38-113. - Locations requiring installation.

Every building constructed or structurally altered after October 11, 1976, shall have an approved automatic sprinkler system installed and maintained when occupied, in whole or in part, for the following purposes:

(7) *Institutional buildings and hospitals.* Throughout all hospitals, nursing, convalescent, old age and other institutional buildings.

(9) *Hazardous occupancies.* Throughout every building which by reason of its construction or highly combustible occupancy involves a severe life hazard to its occupants or, in the judgment of the fire chief, constitutes a fire menace.

Lisbon

34.19 FIRE PREVENTION CODE

(a) Adoption of Codes and Standards:

(1) All Orders, Rules and Regulations established and propagated by the Department of Commerce, or its successor Administrative Agency, as are set forth in the Wisconsin Administrative Code as from time to time amended, are hereby adopted. The most current legislatively enacted versions of those documents are adopted and will be enforced.

(2) NFPA 1. Fire Code® and NFPA 101. The Life Safety Code® are hereby adopted in their entirety as part of this Chapter and serve as the fire prevention codes for the municipality. The most current available printed edition of the NFP A Codes and Standards are hereby adopted and will be enforced.

(3) All codes and standards referenced in any of the code documents adopted herein shall be deemed adopted herein and are codified and have the strength of code.

a. In the event of a conflict between the provisions of this Ordinance, State Codes, NFPA Codes and Standards, the provisions of this Chapter where specifically more restrictive by application shall control and govern. Thereafter, the most restrictive provision of the State Codes or NFPA Codes shall be applicable and shall govern.

34.20 AUTOMATIC SPRINKLER SYSTEMS

(b) Where installed. In addition to the requirements set forth in the above adopted codes and standards, every newly constructed building or building structurally altered by more than 50% of original structures footprint, as determined by a Wisconsin licensed structural engineer, shall have an approved automatic sprinkler system installed and maintained when occupied, in whole or in part, for the following purposes:

(1) Assembly A.

b. Assembly group A buildings that can accommodate 100 or more persons shall have an approved sprinkler system installed and maintained throughout.

c. Any building that contains A-2 uses shall have an approved sprinkler system installed and maintained throughout.

(3) Educational group E. An approved sprinkler system shall be installed and maintained throughout all educational occupancies.

(5) High hazard group H. An approved sprinkler system shall be installed and maintained throughout all group H occupancies.

(6) Institutional group I and residential group R-4.

a. An approved sprinkler system shall be installed and maintained throughout all Group I and Group R-4 Occupancies.

1. Through the combined use groups Identified in the IBC and NFPA 101, any and all uses which shall render any number of the occupants of that building incapable of self preservation due to anesthesia, age (both old and young), or physical impairment shall have sprinklers and fire alarms installed throughout the physical structure regardless of fire separations in compliance with NFPA 13 and 72. Examples shall include: Dental clinics practicing unconscious sedation, Community Based Residential Facilities, Adult Family Homes and other care facilities that would otherwise require licensing from the Department of Health Services and/or the Department of Children and Families, Etc.

2. Exception: This provision shall not apply to foster care and specialty care in 1 and 2 family residences that are occupied by persons that qualify as primary residents and do not provide a place of employment. In home services, therapies, and specialty care that take place in the home for any single resident over a specific and limited duration of time shall not deem this a place of employment.

(7) Residential groups.

a. Residential Group R-1 and R-2 occupancies, with three or more units, shall have an approved sprinkler system installed and maintained throughout in accordance with state statutes, state administrative codes and town ordinances.

(9) Utility and miscellaneous group U. Group U covers all building and structures not covered in any other occupancy classification. Sprinkler system requirements for group U buildings and structures chapter will be reviewed by the AHJ or designee on a case by case basis.

(10) Below Grade Occupancies: Any occupancy group that desires to occupy any portion of a level that is 50% or greater below grade for any reason other than storage shall have a sprinkler system at that level and any component means of egress for that space and must be tied into a fire alarm system that serves the entire building.

(c). Exceptions.

1. The following classes of buildings shall be exempt from the requirement of automatic sprinkler systems:

(a) Any portion of a building housing a process or material which would interact with water to create a greater fire hazard than without water, provided that an alternate fire suppression system is used.

(d). Fire department hose connections.

1. Every automatic sprinkler system installed in new or existing buildings shall be equipped with at least two female couplings for fire department hose connection, with National Standard Treads attached to a header of adequate size in accordance with fire protection engineering standards, but not less than four inches to supply the riser of the system.

(e) Variances

1. Any request for variance to the requirements of section (c) Automatic Sprinkler Systems shall include:

(a) the submittal of the current LFD "plan submittal form,"

(b) all associated fees,

(c) A formal letter of justification for variance and;

(d) A plan for creating an equivalent level of life safety to the building.

2. Sufficient numbers of this documentation shall be provided as to allow for review by the Fire Prevention Bureau, the Town of Lisbon Building Inspector and the Town Board. Variance requests must receive approval from all three entities to be granted.

3. Variances will only be considered in cases of technical infeasibility and/or significant financial disproportionality. Any request that fails to establish one or both of these conditions will not be approved.

(f) Installation.

1. Approved automatic fire sprinkler equipment shall be installed in accordance with one or more of the following NFPA standards as the chief of the fire department may determine are applicable:

(a) NFPA #13, "Standards for the Installation of Sprinkler Systems."

(b) NFPA #13D, "Sprinkler Systems - One and Two-Family Dwellings."

(c) NFPA #13R, "Sprinkler Systems in Residential Occupancies up to and Including Four Stories in Height."

(d) NFPA #231, "General Storage."

(e) Such other NFPA standards as the AHJ may determine are applicable.

(3) An outdoor rated horn/strobe notification device with an excess of 100-candle power shall be installed in lieu of or in addition to the required bell. The normal placement is above the fire department connection, but shall be approved by the AHJ.

(4) All Sprinkler systems shall be monitored for water flow by a central or remote station per current NFPA 72 and provide notification throughout the structure for purposes of evacuation.

(g) Minimum Requirements for Sprinkler Systems Installations

(1) In cases where a municipal water supply is not immediately available to the owner, the water supply and design of the system shall be allowed as identified below or by method approved by the AHJ, but may not be less than identified by the appropriate State Building Code Sections for Alternative Suppression Systems and NFPA 22 (Standard for Water Tanks for Private Fire Protection). Where required by the current edition of the IBC or NFPA 101, the installation standards NFPA 13, 13R or 13D shall apply. All sprinkler system installations must submit appropriate plans, permit forms, fee's, calculations and additional information to the Fire Prevention Bureau for review and "Conditional Approval" prior to installation.

(h) Interim Automatic Fire Sprinkler Installations:

(1) Where Allowed:

(a) Interim installations will only be allowed for systems where the installation of the suppression system is required by only this ordinance. All other installations shall be designed in accordance with their appropriate installation standard.

(b) Interim installation design will not be allowed for type A, E, H, I, R occupancies or other use groups that will required design for protection of commodities at classification level, Ordinary Hazard (group 2)/(OH2) or greater. Exception: Consideration may be given for type R and I occupancies on a case-by-case basis.

(i) Installation Requirements for Water Supply:

(1) Only aboveground and underground factory-coated and/or lined steel tanks, fiberglass reinforced plastic tanks and concrete tanks shall be allowed.

(2) All above ground plastic tanks shall be protected to an Ordinary Hazard 2 level or greater.

(3) All tank installations shall be tested and documented in compliance with NFPA 22.

(4) All tanks shall include water level monitoring and automatic tank refill. These points shall be monitored by the fire alarm system as follows:

(a) Automatic tank refilling shall identify as a trouble condition to make the owner aware of possible leaks.

(b) Low level conditions shall generate a supervisory condition and shall command immediate correction.

(5) All water supply valves that supply the tank refill, are between the tank and the riser, or serve as shut-offs, shall be clearly identified for their function and secured and/or monitored by the fire alarm system.

(6) The power source for the automatic refill solenoid shall be clearly identified in the panel, marked in red and provided with a listed breaker lock.

(7) All Fire pumps shall be listed and labeled NFPA 13 compliant fire pumps.

(8) All suppression system components shall be provided with a redundant power source.

(a) In cases where a back-up generator serves as the redundant power source, the generator shall undergo acceptance testing by the AHJ to assure compliance with emergency transfer requirements and a record of inspection, testing and maintenance shall be kept with the sprinkler and fire alarm test records at the riser for review by the AHJ and any contractor who will service or test the system.

(b) Nothing in this requirement shall be misconstrued to mean that the installation of a generator must be a dedicated service as long as the life safety and suppression systems are primary to this power source.

(9) In areas of the Town where municipal water supply is being constructed, immediately projected to be constructed, or in the planning states of being constructed, required sprinkler systems shall not be required to be connected to an interim supply; however, all design and installations shall include provisions for immediate connection to the municipal water supply as it becomes viable. These cases shall be clearly documented by the building owner and approved by the AHJ.

(10) The full extent of this interim system must be included and undergo inspection, testing and maintenance in accordance with NFPA 25.

(j) Design Requirements for Interim Installations:

(1) Connection to the domestic water supply shall be required.

(3) One or more fire department connections with two female couplings with National Standard Treads attached to a header of adequate size in accordance with fire protection engineering standards, but not less than four inches shall be provided to supply the system.

(4) All fire sprinkler systems installed under the requirements of this division shall be connected to a municipal water system within twelve months after water mains to serve the building are available for use.

34.21 FIRE ALARM SYSTEMS

(1) General. No fire alarm shall be installed that is not monitored, capable of manual activation at required means of egress or unable to adequately notify all occupants to evacuate.

(2) All fire alarm systems shall be installed per NFPA 72, NFPA 70 (NEC), this ordinance and the instructions of the AHJ. All fire alarm installations must be done under the combined permits of the Lisbon Fire Department and the Town Building Inspector.

(6) Where installed, all alarm conditions shall initiate HVAC shutdown.

(8) Where Installed

- (a) Fire alarms shall be installed as required by the building code and NFPA 1/101.
- (b) All new buildings that contained separated or mixed uses by which the presence of a fire condition would not be immediately identified shall have fire alarm systems
- (c) All existing buildings that contain separated or mixed uses and undergo a change of use for any one part of the building shall install a fire alarm system throughout the building. For these installations an extended amount of time shall be agreed upon and documented between the owner or owner representative and the LFD.
- (d) For the purpose of fire alarm installations, the presence of fire rated construction within the total footprint of a building shall not be considered as multiple-separate buildings within one structure.
- (e) The AHJ reserves the right to require fire alarm systems in any structure that he/she deems a hazard or threat to the life and/or safety of its occupants.

34.22 GENERAL FIRE PREVENTION AND LIFE SAFETY PROVISIONS

(1) Fire-rated and Fire-resistive construction:

- (a.) All fire walls, resistive construction and partition walls shall be labeled in a durable manner with the hourly rating of the assembly. This label may be above a drop ceiling if the label occurs no more than every 15 feet along the duration of the rated assembly.
- (b) All penetrations and damage to rated assemblies shall be properly sealed with listed products that provide the same or greater level of protection as the assembly.
- (c.) All other assemblies shall be draft stopped to prevent rapid spread of smoke, flame and other products of combustion throughout the building.

(2) Light weight construction:

- (a.) All occurrences of light-weight construction shall be protected by no less than a 1 hour fire resistive assembly. Where light-weight construction is used as a horizontal assembly between occupied levels, the hourly rating shall be no less than 90 min.

- (i) Exception: Where the building is fully sprinkled the assembly rating may be reduced to 1 hour.

(3) All Type I hood installations shall be compliant with NFPA 96 and this Ordinance.

- (a) The installation of a type I hood in any new or existing building must provide notification of for the purposes of occupant evacuation throughout the building in compliance with 34.20(D) and NFPA 72.
 - (i) Existing type I hoods shall be exempt from this condition unless they are not in compliance with UL300 standards. In cases of compliance upgrades the rules of 34.20.(E)(3) shall apply.

- (b) All suppression activations and full alarm conditions shall initiate HVAC shutdown and the shunting of gas and electric from under the hood while sustaining the ventilation fan for the

removal of smoke and gases from the building.

Madison, City of

34.01

(13) Adoption by Reference: State and National Codes.

(a) The codes in the *International Fire Codes* and the Wisconsin Administrative Codes that are adopted by reference are the most current edition of the referenced code and any subsequent editions of the referenced codes.

(b) IFC. The *International Fire Code*", subject to the modifications specified in this chapter.

(c) The following Wisconsin Administrative Code Chapters:

SPS 305 - Licenses, Certifications and Registrations

SPS 307 - Explosive Materials

SPS 310 - Flammable and Combustible Liquids

SPS 314 - Fire Prevention

SPS 316 - Electrical

SPS 318 - Elevators

SPS 328 Smoke Detectors

SPS 340 - Gas Systems

SPS 343 Anhydrous Ammonia

SPS 361-366 - Wisconsin Commercial Building

SPS 366 Existing Buildings

SPS 375-379 - Buildings Constructed Prior to 1914

SPS 381-387 - Plumbing

34.903 AUTOMATIC SPRINKLER SYSTEMS.

(1) The following requirements are in addition to the requirements found in IFC section 903.3.5: Automatic sprinkler systems shall provide a minimum safety factor of ten percent (10%) or 5psi, whichever is greater, in the fire protection system hydraulic calculations below the water supply curve.

(2) The following language is substituted for IFC section 903.4.2: Approved audible and visual notification devices shall be connected to every automatic sprinkler system. Such notification devices shall be activated by water flow equivalent to the flow of a single sprinkler of the smallest orifice size installed in the system. Alarm devices shall be provided on the exterior of the building located above the fire department connection. Where a fire alarm system is installed, actuation of the automatic sprinkler system shall actuate the building fire alarm system.

34.904 COMMERCIAL COOKING SYSTEMS.

(1) The following requirements are in addition to the requirements found in IFC section 904.11.6: Duct and hood systems, including the fire extinguishing system, shall be maintained in accordance with NFPA 96, as referenced in Wis. Admin. Code chs. SPS 361 to 365.

34.907 FIRE ALARM AND DETECTION SYSTEMS.

(1) Smoke Alarms. Buildings built before 2009 shall comply with this section, all buildings built after Rev.6/15/12 2009 shall comply with IFC section 907.

(b) Required Installation.

1. On August 15, 2009 all residential buildings, except owner-occupied single family homes, shall have smoke alarms in place which meet one of the following requirements:

a. A smoke alarm with two (2) independent power sources consisting of a primary source that uses commercial light and power and a secondary source that consists of a non-rechargeable or rechargeable battery.

2. On August 15, 2009 all owners of residential buildings, except owner-occupied single family homes, shall install and maintain a smoke alarm in each bedroom, in every sleeping area and within six (6) feet of each door leading to a bedroom or sleeping area of each unit and on each floor of the building. This subdivision does not apply to owners of hotels and motels.

3. If the residential building has smoke alarms powered by the building's commercial light and power, the smoke alarms may remain in service until such time the device must be replaced in accordance with the manufacturer's instructions or sub. (3)(h). Replacement smoke alarms must meet the requirements of sub. (2)(a)l.

5. Smoke Alarm Installation. Smoke alarms should be installed in accordance with this section and other applicable state building codes. Single and multiple station smoke alarms shall be installed in compliance with the requirements of NFPA 72.

6. Approval. Any smoke alarm required by this section shall be listed by a Department approved listing source .

(e) This ordinance does not apply to any buildings that have smoke detectors installed as required by other codes, ordinances, or standards and located in locations specified in sub. (2)(b) .

(3) Alarm Notification Appliances. In IFC section 907.5.2.1.1 the sentence is in addition to: The minimum sound pressure levels shall be: 75dBA in occupancies in Groups R and in 1-1; 90 dBA in mechanical equipment rooms and 70dBA in other occupancies.

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SEC. 3-7-50: Automatic Fire Sprinkler Systems Required

(g) Nursing, Convalescent, Old Age, Prison, Group Care and Other Institutional Facilities. Throughout all nursing, convalescent, old age, prison, and other group care or institutional facilities.

(i) High Hazard Occupancies. Throughout any building which by reasons of its construction, use or high combustible occupancy, involves a severe life hazard to its occupants, or which in the judgment of the Fire Chief constitutes a fire hazard, including, but not limited to: .

(1) Aircraft hangars.

(2) Dry cleaning establishments using or storing gasoline or other volatile flammable liquids.

- (3) Enameling of japanning operations
- (4) Mills, including sugar, starch, cereal, feed, flour and grist.
- (5) Paint and varnish, including manufacturing, storing, handling, spraying and other related operations
- (6) Pyrozylin products, manufacture and storage
- (7) Repair garages
- (8) Smokehouses
- (9) Storage of explosives gases under pressure {fifteen (15) p.s.i and over five thousand four hundred (5,400) cubic feet} such as acetylene, hydrogen, natural gas, etc
- (10) Storage of materials with a flash point under two hundred degrees Fahrenheit (200 F) such as celluloid products, kerosene, fuel, oil, etc
- (11) Woodworking establishments
- (12) Chemical works
- (13) Explosives and pyrotechnics manufacturing
- (14) Oil refineries
- (15) Any other occupancies involving processing, mixing, storage and dispensing of volatile liquids

(k) Exceptions. Automatic fire sprinkler systems shall not be required in:

- (1) Certain Manufacturing Areas. Rooms or buildings used for the manufacture or storage of aluminum powder, calcium carbide, calcium, metallic sodium or potassium, quick lime, magnesium powder, sodium peroxide or like materials where the application of water may cause or increase combustion.
- (2) Where Water Would Increase Hazard. Any location where, in the sole discretion of the Fire Chief, the use of the water as a fire extinguishing agent would increase hazards or unduly expose equipment, machinery, or other chattel to damage or destruction provided, however, that an automatic fire suppression system using an extinguishing agent other than water or any automatic smoke detection system is installed, and such location is connected to an approved Central Station Monitoring service.

SEC. 3-7-51: Installation and Inspection of Automatic Fire Sprinklers.

(a) Installation Standards.

- (1) Approved automatic fire sprinkler equipment shall be installed in accordance with the current editions of Pamphlet No. 13, "Standards for the Installation of Sprinkler Systems", and other applicable standards of the National Fire Protection Association.

(c) Specific System Requirements.

- (1) System Drain. The building automatic sprinkler system shall have a drain piped to the outside of the building or to a drain suitable to handle the required flows.

(2) Inspector's Test Valve. The building automatic sprinkler system shall have an inspector's test valve piped so as to discharge to the outside of the building. The inspector's test valve shall be mounted at the most hydraulically remote location of the system. An orifice equal to the discharge of one (1) sprinkler head shall be installed on the outside of the building. The sprinkler alarm shall be tied into the building alarm system.

(3) Alarm Bell. Alarm bells shall be installed on all alarm systems. One (1) bell shall be installed on the outside of the building. The sprinkler alarm shall be tied into the building alarm system.

SEC. 3-7.-52: Alarm Systems (Fire and Smoke Detection).

(b) Where Required. Smoke and heat detection systems shall be installed in all spaces in all buildings regardless of size or construction except for one (1) and two (2) family dwellings. The detection systems shall be in all spaces, including but not limited to hidden spaces (e.g., attics, crawl spaces, truss constructed areas), basements, storerooms, closets, occupied and unoccupied areas. One (1) and two (2) family dwellings shall have smoke detection systems as required by Wisconsin Administrative Code.

(c) Monitoring. All detection systems shall be monitored by an approved central station monitoring service, except for one (1) and two (2) family dwellings.

(d) Installation.

(1) All components of a fire or smoke detector system shall be listed by Underwriters Laboratories (UL) or the Factory Mutual System (FM). The entire installation shall conform to applicable provisions of NFPA Standards 71, 72A, 72C, 72D, or 72E, the National Electrical Code Article 760, and the Wisconsin Electric Code.

(2) The system shall monitor the integrity of all alarm initiating and indicating appliance circuits, shall be provided with automatically charged standby batteries to maintain system operation for twenty-four (24) hours in the normal supervisory mode and have sufficient capacity to operate in the alarm mode for five (5) minutes at the conclusion of this supervisory time period. Batteries shall be supervised for connection to the system and for low voltage threshold. The automatic battery charger shall be capable of charging fully discharged batteries to one hundred percent (100%): . . .

(3) A remote annunciator shall be provided at the main entrance of the building to indicate each of the designated alarm initiating zones via RED LED's which flash when in a alarm mode and lock in upon acknowledging the alarm. The remote annunciator shall be electrically supervised from the main fire alarm control panel. Space shall be provided on the remote annunciator for custom zone labels. The zone labels shall plainly describe the location of the zones. Different occupancies in one (1) building shall be zoned separately.

(5) External devices:

a. The system shall utilize UL or FM listed fire alarm indicating devices (Pull stations, smoke detectors, heat detectors, water flow switches, duct detectors etc.) and UL and FM listed fire alarm indicating devices (horns, bells, visual lights, etc.). Smoke detectors shall possess a Light Emitting Diode (LED) lamp to indicate either "ready" or "alarm" status.

b. Smoke detectors (photoelectric, ionization) shall be installed approximately thirty (30) feet on center, located on the ceiling or wall of the protected area. Smoke detection shall be

provided but not limited to the following areas: basements, common hallways, stairwells, sleeping rooms, and all other rooms over fifty (50) square feet in area.

c. Heat detectors shall be installed approximately thirty (30) feet in the center, located on the ceiling of the protected area. Heat detection shall be provided not limited to the following areas: furnace rooms, engine rooms, garages, hidden spaces and kitchens and all other rooms over (50) square feet in area. Heat detectors shall also be installed as a substitution for smoke detectors in locations determined by the Fire Chief to be unsuitable for smoke detector installation.

d. Horns/Bells:

1. Alarm System Horns: Horns used as the audible alarm indication appliance shall be twenty-four (24) volt direct current (DC) horns of metal construction. With the minimum sound pressure output at eighty-seven (87) db at ten (10) feet. Fire alarm horns shall be UL or FM listed for fire alarm use. Horns shall be adaptable for surface or semi-flush mounting and be suitable for use within combination audio-visual systems.

2. Alarm System Bells: Bells used as the audible alarm indicating appliance shall be twenty-four (24) volt DC bells of the vibrating or single stroke type with a minimum sound pressure output of ninety (90) db at ten (10) feet. Bells shall be suitable for sound pressure or semi-flush mounting and be suitable for use within combination audio-visual systems

3. Visual Flashing Lamps: Visual indicating appliances shall be comprised of a strobe-type flash tube and be entirely solid state. These devices shall be UL or FM listed and shall be capable of either ceiling or wall mounting. Visual units shall incorporate a built-in reflector to improve lighting characteristics. Visual units shall be incorporated as part of the horn or bell assembly.

4. Horns, bells or visual flashing lamps shall be installed in each unit, living space or tenant space in the building.

(e) System Operation.

(1) Alarm initiating devices shall be grouped in zones identified by zone LED's on the control panel and at the remote annunciator.

(2) Actuation of an alarm initiating device shall:

a. Cause the respective red zone alarm LED on the control panel to flash until the "Acknowledge" switch is actuated at the control panel. Once acknowledged, the zone LED shall be constantly illuminated until the actuating device is restored to normal and the system is rest or equivalent operation.

b. The audible alarm indicating appliance shall sound throughout the entire facility until the system alarm acknowledge/silence switch is operated.

c. Visual indicating appliances shall flash until the acknowledge/silence switch is operated.

d. After the acknowledge switch is operated, subsequent activation of an initiating appliance shall cause the alarm bells or horns to resound, and the visual indicating appliances to flash.

(3) Each alarm initiating circuit and indicating appliance circuit shall be electrically supervised. Any disarrangement of system wiring such as opens and grounds shall activate the audible and visual trouble indicators at the control panel. Actuation of the trouble silence switch shall silence the audible trouble indicator but the trouble LED shall remain lit. The trouble LED shall be non-canceling, except by an actual clearing of the trouble condition and restoring the trouble silence switch to normal.

(4) The alarm system shall provide for the selection of:

- a. Desire type of signal operation; alarm signal tempos, area selective codes, zone codes, general alarm codes and alarm silence inhibit.
- b. UL or FM approved alarm verification operation.
- c. Water flow/sprinkler supervisory operation on a distinct zone of the system.

(5) Upon actuation of a smoke detector, the LED on the smoke detector shall remain constantly illuminated until the system is reset.

SEC. 3-7-53 Existing Buildings.

(a) Except as hereinafter provided, automatic fire sprinklers, smoke detectors and standpipes need not be installed in buildings which existed or were under construction before Secs. 3-7-50, 3-7-51 and 3-7-52 became effective unless such installation was required by a previous ordinance, administrative regulation, statute or law.

(b) Where a building is expanded or remodeled and the building as remodeled or expanded is of a size, is of a type, or is of a use which, where the building then to be constructed would be subject to the provisions of Secs. 3-7-50, 3-7-51 and 3-7-52, in addition, the following shall apply to existing buildings:

(1) The entire building (existing, new and remodeled areas) shall be made to conform to the provisions of Secs. 3-7-50, 3-7-51 and 3-7-52 if more than fifty percent (50%) of the gross interior area of the building is remodeled or added to the building or the cost of the project is more than twenty-five (25%) of the Town of Madison Assessor's full estimated market value of the building, excluding any cost for cosmetic improvements, then the fire areas of the entire building shall be protected with an automatic fire sprinkler system, regardless of whether such remodeling or alteration results in an increase in the fire areas of the building.

(4) In determining the foregoing percentages successive additions, expansions, or remodeling, if made within a twenty (20) year period, shall be aggregated and treated a single expansion or addition.

(c) Regardless of any percentage test set forth in subsection (b), if the additional expanded, or remodeled areas is of a size, is of a type, or is for a use which is subject to the provisions of Secs. 3-7-50, 3-7-51 and 3-7-52, the additional, expanded, or remodeled areas must conform to the requirements of such Sections.

(d) Where at the time of its construction a building or any part thereof is exempt from the requirements of Secs. 3-7-50 and 3-7-51 by reason of its proposed or intended use and subsequent to construction the use of such building or part thereof is changed in such a way that the reason for the exemption no longer exists, the entire building or area as the case may be made to conform to the requirements of Sec. 3-7-50 and 3-7-51.

(e) If the use of an existing building or structure is changed and the requirements for the new use are more stringent than those for the previous use, the building or structure shall be made to comply with the requirements for the new use as provided in this Chapter.

Manitowoc

15.710 Standards for Wireless Telecommunication Facilities.

(aa) Fire Protection. Tower support buildings shall be designed and constructed with built-in ventilation. At least one smoke detector shall be installed in each support or accessory building, which, upon activation, will terminate the electrical power to the building. No combustible storage is permitted in tower support structures.

Medford

15.1.111 FIRE SPRINKLER SYSTEMS.

(A) All structures being serviced by a fire protection system with a fire department connection shall have an audio and visual alarm that notifies the Fire Department of water flow in the sprinkler system installed above the fire department connection at a height to maximize view and prevent the tampering of the device. If the audio and visual device can not be mounted directly above the fire department connection, the Fire Chief may in writing allow an offset of up to 4 feet from the center of the connection on the same face plane of the structure.

(B) New construction shall comply with division (A) above.

(C) Existing structures having a fire protection system with a fire department connection on the effective date of the passage of this section shall have 3 years to comply with division (A) above.

Menasha, Town of

5.08 FIRE PREVENTION CODE

(2) Primary Code Adoption. This Code shall be known as the Town of Menasha Fire Prevention Code. This Code adopts, but is not limited to the State of Wisconsin, Division of Safety and Buildings Administrative Codes (Commerce), the Wisconsin Enrolled Building Code, the National Fire Protection Association (NFPA) incorporated standards and codes as published in the National Fire Codes (NFC), and the International Fire Code®-2009 (IFC) shall be adopted in place of Commerce Chapter 14, Subchapter I section 14.001(2)(a) save and except those portions such as are hereinafter deleted, modified, or amended by any Section of this ordinance. The same, including any future modifications or amendments, are hereby adopted and incorporated as fully as if set out at length herein. Not less than two (2) copies of the adopted issue of the International Fire Code and the adopted standards and codes of the National Fire Codes shall be filed in the office of the Fire Department and the provisions thereof shall be controlling within the limits of the Town of Menasha. Any facility whose design and construction occurred before the effective date of this code is governed by the codes in effect at the time of design and/or construction. The provisions in Commerce Chapter 14 and the International Fire Code will apply to the use and operation of all public buildings and places of employment that exist on or after the effective date of this ordinance.

(16) The provisions of the Town of Menasha Fire Prevention Code shall apply equally to both public and private property, and it shall apply to all structures and their occupancies, except as otherwise specified.

5.11 NEW BUILDINGS - FIRE DETECTION AND SUPPRESSION

(1) System Control Location. All Fire Detection and Suppression controls shall be located in an accessible location for the Fire Department.

(2) Smoke Detectors. Refer to the State of Wisconsin, Division of Safety and Buildings Administrative Codes, the Wisconsin Enrolled Building Code, and codes in effect at the time of construction for installation and the International Fire Code for maintenance.

(d) Buildings and areas where required. Every building constructed or structurally altered shall have an approved automatic sprinkler system installed and maintained when occupied in whole or part for the following purposes.

IFC Chapter 9, Section 903, Automatic Sprinkler Systems:

a. *ADD*: IFC Section 903.2: Basements in excess of one thousand five hundred (1,500) square feet in buildings other than residential facilities. Alternative to the above may be:

1) Basement area is compartmentalized with two-hour rated walls so that the basement areas are less than one thousand five hundred (1,500) and a one-hour rated, floor-ceiling assembly.

a) Fire Department access openings are provided so that:

1- No part of the basement is further than seventy-five (75) feet from an opening.

2- The basement shall be provided with openings of at least twenty (20) square feet in each fifty (50) lineal feet of exterior wall of the basement, on at least one (1) side of the building.

b) Dimension openings shall be a minimum of thirty (30) inches and the bottom of the opening shall not be more than forty-eight (48) inches above the floor.

c) The openings shall be accessible to the Fire Department from the exterior and shall be unobstructed to allow fire fighting and rescue operations.

c. *DELETE*: which generate finely divided combustible waste or which use finely divided combustible materials.

(f) Assembly (Group A):

1. *ADD*: IFC Section 903.2.1: Automatic sprinklers are to be installed throughout all such buildings of non-fire resistive construction if such place of assembly is located above the first floor, whether or not there is a stage.

2. *ADD*: IFC Section 903.2.1: Automatic sprinklers are to be installed throughout all basement areas used for assembly and exiting stairways from such assembly area.

4. *ADD*: IFC Section 903.2.1. In every Group A where a proscenium curtain is required, automatic sprinklers shall be provided under the stage, under the stage roof, and in the dressing rooms but not in the automatic smoke outlet.

(h) Storage (Group S -2): *ADD*: IFC Section 903.2.9

1. Throughout all closed parking ramps or structures which are used for public parking of passenger vehicles.

2. Facilities for repairing or fueling vehicles within the structure are prohibited.

(i) Application to existing buildings. Where the Fire Chief finds that by reason of a change in use, construction addition or renovation an existing building constitutes a severe fire hazard to its occupants or to adjoining property, the provisions of this section shall apply.

(k) Alternative materials and methods.

2. The Fire Chief on notice to the Community Development Department may approve any alternate material or method, provided that the proposed design, use or operation satisfactorily complies with the intent of this code and that the material, method of work performance or operation is, for the purpose intended at least equivalent of that prescribed in this section in quality, strength, effectiveness, fire resistance, durability and safety, provided, however, that any approval under the authority herein contained shall be subject to the approval of the building official whenever the alternate material or method involves matters regulated by the state building code.

3. The Fire Chief may require tests as proof of compliance with the intent of this section, such tests to be made by an approved agency at the expense of the person requesting approval of the alternate material or method of construction.

4. If technical expertise is unavailable within the department because of new technology, process, products, facilities, materials and uses attending the design, operation or use of a building or premises subject to the inspection of the department, the Fire Chief may require the owner or the person in possession or control of the building or premises to provide without charge to the department, a technical opinion and report. The opinion and report shall be prepared by a qualified engineer, specialist, laboratory, or fire-safety organization, acceptable to the Fire Chief and the owner and shall analyze the fire safety properties of design, operation or use of the building or premises and the facilities and appurtenances situated thereon, and prescribe the necessary recommended changes.

(4) Standpipes

(b) Installation standard. International Fire Code Section 905.2 shall apply.

5.12 EXISTING BUILDINGS – FIRE DETECTION & SUPPRESSION

(1) Except as hereinafter provided, automatic fire sprinklers, smoke detectors and standpipes need not be installed in buildings which existed or were under construction before this ordinance became effective unless such installation was required by a previous ordinance, administrative regulation or state statute.

(2) Where a building is expanded or remodeled and the building as remodeled or expanded is of a size, a type, or a use, which, were the building then to be constructed, would be subject to the provisions of Sections 5.11, the following subsections shall apply:

(a) The entire building shall be made to conform to the requirements of sections 5.11 if more than 50% of the gross interior area of the building is remodeled or added to the building.

(e) In determining the foregoing percentages successive additions, expansions, or remodeling, if made within a period of two (2) years shall be considered aggregated and treated as a single expansion or addition.

(3) Regardless of any percentage set forth in Section 5.12 (2) if the additional, expanded, or remodeled area is of a size, is of a type, or is for a use which is subject to the provisions of Section 5.11, the additional, expanded, or remodeled area must conform to the requirements of such Sections.

(4) Regardless of any percentage set forth in Section 5.12 (2) where any dwelling is remodeled or expanded and the quotient obtained by dividing the total cost of the expansion, addition, or the remodeling by the total number of dwelling units in the building equals or exceeds \$1,000.00, the entire building shall be made to conform to the requirements of Section 5.11.

(6) Where at the time of its construction a building or any part thereof is excepted from the requirements of Section 5.11 by reason of its proposed or intended use and subsequent to construction the use of such a building or part thereof is changed in such way that the reason for the exception no longer exists, the entire building or area as the case may be, shall be made to conform with the requirements of the Wisconsin Enrolled Building Code.

(7) If the use of an existing building or structure is changed and the requirements for the new use are more stringent than those for the previous use, the building or structure shall be made to comply with the requirements for the new use as provided by this ordinance.

5.15 ACCESS IN CONSTRUCTION AREAS

Scope: The provisions of this section identify those requirements for Fire Department access in areas under construction.

IFC Chapter 14 Fire Safety During Construction and Demolition, Section 141.1, Means of Egress:

(1) *SUBSTITUTE*: During the course of construction, any major alteration, or demolition of any building:

(a) Access for Equipment. Access for use of heavy fire fighting equipment shall be provided to the immediate job site at the start of construction and maintained until all construction is completed.

(b) Access to Fire Hydrants. Free access from the street to fire hydrants, and to outside connections for standpipes, sprinklers, or other fire extinguishing equipment, whether permanent or temporary, shall be provided and maintained at all times. Protective pedestrian walkways shall not be so constructed as to impede ready access to hydrants. No material or construction shall be placed within ten (10) feet of such hydrants or connections, not between them and the centerline of the street.

(c) Access to First Aid Fire Equipment. During building operations, free access to permanent, temporary or portable first aid fire equipment shall be maintained at all times.

(d) Stairways. In all buildings over 50 feet in height, at least one stairway shall be provided in usable condition at all times. This stairway shall be extended upward as each floor is installed in new construction.

(e) Fire Department Access to Premises. Arrangements shall be made so that the Fire Department will have immediate access to the premises when called.

Menomonee Falls

Sec. 46-57. - Commercial and institutional kitchens.

- (a) All commercial and institutional kitchens shall have a UL approved hood and duct extinguishment system that conforms to the requirements of NFPA 96 as approved by the authority having jurisdiction. The system shall also be provided with an automatic fuel cutoff.
- (c) All extinguishing systems shall be inspected and maintained at least semi-annually by a factory authorized representative and the unit shall have a certification tag of the inspection attached to the extinguishing agent system or discharge canister.

Sec. 46-98. - Where installed.

(a) Every building constructed or structurally altered shall have an approved automatic sprinkler system installed and maintained when occupied, in whole or in part, for the following purposes:

- (3) *Educational group E.* An approved sprinkler system shall be installed and maintained throughout all educational occupancies.
- (5) *High hazard group H.* An approved sprinkler system shall be installed and maintained throughout all group H occupancies.
- (6) *Institutional group I and residential group R-4.* An approved sprinkler system shall be installed and maintained throughout all Group I and Group R-4 Occupancies.
- (8) *Utility and miscellaneous group U.* Group U covers all building and structures not covered in any other occupancy classification. Sprinkler system requirements for group U buildings and structures chapter will be reviewed by the fire chief on a case by case basis.

Sec. 46-100. - Fire department hose connections.

Every automatic sprinkler system installed in new or existing buildings shall be equipped with at least one five-inch Stortz fire department hose connection within 300 feet by means of drivable hard surface access to a hydrant at a location approved by the chief of the fire department. The supply piping for the system shall not be less than four-inch diameter.

Sec. 46-101. - Installation.

(a) Approved automatic fire sprinkler equipment shall be installed in accordance with one or more of the following NFPA standards as the chief of the fire department may determine are applicable:

- (1) NFPA #13, "Standards for the Installation of Sprinkler Systems."
- (2) NFPA #13D, "Sprinkler Systems - One and Two-Family Dwellings."
- (3) NFPA #13R, "Sprinkler Systems in Residential Occupancies up to and Including Four Stories in Height."
- (4) NFPA #231, "General Storage."
- (5) Such other NFPA standards as the chief of the fire department may determine are applicable.

(b) No automatic sprinkler equipment shall be installed or altered in a building until plans have been submitted to and approved by the chief of the bureau of fire prevention. Three copies of the plans and

specifications shall be submitted for review. Approved plans shall be stamped, "Approved bureau of fire prevention," together with the date of such approval.

(c) An outdoor rated horn/strobe notifier with an excess of 100-candle power shall be installed in lieu of the required bell. The normal placement is above the fire department connection, but shall be approved by the chief of the fire department.

(d) All Sprinkler systems shall be monitored for water flow by a central or remote station per current NFPA 72.

(e) Underground water mains, hydrants and valves shall conform to current specifications of the village.

(f) The water utility will require such tests as may be required by the National Fire Protection Association's standards. Such tests shall be conducted under the supervision of a utility representative who shall certify acceptance or rejection of the system.

(g) Final approval, acceptance test—Automatic sprinkler system.

(1) The sprinkler system shall have a hydrostatic test performed in the presence of a fire department inspector.

(2) The sprinkler system shall be tested by flows of the main drain and inspector's test. The installer in the presence of a fire department inspector shall conduct the acceptance test.

(3) The installer shall provide minimum three working days advanced notice to the fire department prior to performance of final acceptance test.

(4) Any work or testing performed on sprinklers and underground supply shall be done by a dully licensed individual.

(h) Maintenance. The owner or occupant of a building or structure containing any automatic sprinkler system shall maintain that system in an operative condition at all times which includes periods where the building may not be occupied. The occupant of the building shall notify the fire chief immediately in case the sprinkler protection is rendered out of service for any reason. All sprinkler systems shall be tested to meet the requirement of NFPA 25. A person(s) or company holding a testers credential issued by the State of Wisconsin shall perform the tests.

Sec. 46-102. - Interim installations.

(a) Unless or until such time as a municipal water supply is available to serve a building in which installation of an automatic sprinkler is required, connection of the system to a water supply shall not be required; however, all design characteristics of systems installed under this division shall include provisions for eventual connection to a municipal water supply. In addition, such interim installations shall also include:

(1) At least one five-inch Stortz fire department connections attached to a header of adequate size in accordance with fire protection engineering standards, but not less than four inches to supply the system.

(2) An automatic fire detection and alarm system of a type approved by the authority having jurisdiction.

b) All fire sprinkler systems installed under the requirements of this division shall be connected to a municipal water system within six months after water mains to serve the building are available for use.

Sec. 46-106. - Fire alarms.

(a) *General.* Fire alarms systems shall mean any device designed to sense or alert persons to the possible presence of fire. A fire alarm system may include but is not limited to, smoke alarms, heat alarms, pull boxes, horns, and strobes and alarm panel. All fire alarm systems shall be installed per NFPA 72. All required alarm systems (required per NFPA 101 or the AHJ) shall be monitored by a UL listed monitoring company.

Sec. 46-130. - Public safety radio coverage in buildings and structures.

(a) Except as otherwise provided in this chapter, no person or organization shall maintain, own, erect or construct any building or structure which is used for commercial, multifamily, or institutional use of any part thereof or cause the same to be done which fails to support adequate radio coverage to public safety service workers, including but not limited to firefighters and police officers.

(b) For purposes of this section, adequate radio coverage shall include all of the following:

(3) Minimum performance levels.

(i) Channel performance criterion (CPC). CPC is the minimum performance level in a faded channel, per TSB-88, clause 4.2. TSB-88 is a "Telecommunications Systems Bulletin" published by the Telecommunications Industry Association. The performance level is rated using "Delivered Audio Quality" (DAQ). Industry standard DAQ definitions are shown in Table 1.

(ii) DAQ level of 3 is the minimum performance level which shall be attainable by public safety radio systems in 95 percent of the area of each floor of a building subject to this division of article III of chapter 46

Table 1

Delivered Audio Quality Definitions

DAQ Subjective Performance Descriptions

1. Unusable, speech present but unreadable
2. Understandable with considerable effort. Frequent repetition due to noise/distortion.
3. Speech understandable with slight effort. Occasional repetition required due to noise/distortion.
- 3.5. Speech understandable with slight effort. Occasional repetition to noise/distortion.
4. Speech easily understood. Occasional noise/distortion.
- 4.5. Speech easily understood. Infrequent noise/distortion.
5. Speech easily understood.

Sec. 46-132. - Amplification systems allowed.

(a) Buildings and structures which cannot independently support the required level of radio coverage shall be equipped with one of the following in order to achieve the required adequate radio coverage: a

radiating cable system or an internal multiple antenna system with or without FCC type-accepted signal booster amplifiers as needed. If any part of the installed system or systems contains an electrically powered component, the system shall be capable of operating on an independent battery and/or generator system for a period of at least 12 hours without external power input. Any battery system employed shall automatically recharge in the presence of an external power input.

(b) The installation of equipment as indicated above cannot be detrimental to the operation of the public safety radio system.

(c) If a signal booster is employed, it shall be fully encased within a dust resistant and water resistant case.

Mequon

Sec. 30-57. Automatic sprinkler systems.

(c) *Installation standards.* Approved automatic fire sprinkler equipment shall be installed in accordance with the current edition of NFPA standard #13, "standards for the installation of sprinkler systems," and/or the current edition of NFPA Standard #13D, "sprinkler systems - one and two family dwellings," and/or the current edition of NFPA standard #13R, "installation of sprinkler systems in residential occupancies up to and including four stories in height," and other applicable current standards of NFPA. It shall be the engineer's, contractor's, and installer's responsibility to design, install, and test the automatic sprinkler system to insure compliance with the above mentioned standards.

(e) *Buildings where installation is required.* Unless specifically exempted by Wisconsin or federal law, all new buildings or existing buildings undergoing restoration, expansion or change of use as specified herein, shall comply with the following requirements for the installation of an automatic sprinkler system:

(1) *New buildings.* Every new building constructed shall have an approved automatic sprinkler system installed and maintained subject to the following:

i. *Hazardous occupancy buildings.* The entire building shall be sprinklered throughout.

(4) *Exceptions.* The following classes of buildings shall be exempt from the requirement of installing an automatic sprinkler system:

a. Any portion of a building housing a process or material which would interact with water to create a greater fire hazard than without water, provided an alternate fire suppression system is used.

(f) *Fire department hose connections.* Every automatic sprinkler system installed in new or existing buildings shall be equipped with at least one fire department hose connection at a location approved by the fire chief.

(g) *Water supply for automatic sprinkler systems.*

(1) Pressurized water systems which can supply an adequate volume of water at sufficient pressure to comply with NFPA Standards.

(2) Pressure tank installed in accordance with NFPA 22" standard for water tanks for private fire protection." The fire chief and/or the fire chief's designee shall determine the minimum quantity of water which shall be available in a pressure tank.

(3) Gravity tanks, reservoir and fire pumps, shall be allowed with the fire chief's approval. These items shall be installed in accordance with current applicable NFPA standards.

(4) All automatic sprinkler systems installed with a limited water supply shall be connected to a future adequate pressurized water system when one becomes available. This connection shall take place within six months after such pressurized water system is accepted by the governing body in charge of such system.

Milwaukee

CHAPTER 214 FIRE PREVENTION

214-23. Battery-Operated Smoke Alarms.

1. TYPE. Every battery-operated smoke alarm shall be powered by 10-year or more non-removable batteries. Compliance with this requirement shall be met when replacing an existing battery operated unit according to the manufacturer's recommended replacement date or by October 1, 2017, whichever is sooner.

2. SILENCING SWITCH. Any smoke alarm located within 20 feet of the primary cooking appliance within the unit shall have a silencing switch.

214-27. Smoke Detectors and Smoke Alarms for Residential Dwellings Built Prior to January 1, 1983.

1. DEFINITION. In this section, "residential building" means any one-family dwelling or 2-family dwelling, or any public building which is used for sleeping or lodging purposes and includes any apartment house, rooming house, hotel, children's home, community-based residential facility or dormitory but does not include a hospital or nursing home.

2. NUMBER AND LOCATION. Every dwelling unit in a residential building constructed prior to January 1, 1983 shall be provided with approved listed and labeled smoke detectors or alarms sensing visible or invisible particles of combustion, installed in a manner and location consistent with their listing. A minimum of one smoke detector or alarm shall be installed in the basement and on each floor level except in an unfinished attic or storage area, and not in a kitchen. For floor levels containing a sleeping area, the required detector or alarm shall be installed within 6 feet of the sleeping area. If a floor level contains 2 or more separate sleeping areas, each sleeping area shall be provided with a smoke detector or alarm. Every residential building other than a one-or 2-family dwelling shall have a functional smoke detector or alarm at the head of every stairway on each floor level in the building.

3. TYPE. Smoke detectors and alarms required under this section shall be single station devices; either battery operated as provided in s. 214-23, plug-in or directed wired A/C units unless otherwise required by the code.

4. RESPONSIBILITY. The owner shall install any smoke detector required under this section according to the directions and specifications of the manufacturer of the smoke detector. The owner shall maintain any such smoke detector that is located in a common area of the building. The occupant of a dwelling unit shall maintain any smoke detector in that unit unless the occupant gives written notice to the owner of the unit that the smoke detector is not functional. The owner shall provide, within 5 days of receipt of such notice, any maintenance necessary to make the smoke detector functional.

5. TAMPERING PROHIBITED.

a. No tenant, co-tenant or any other person may tamper with a smoke detector to:

- a-1. Render it inoperable or in any other way cause it to be in other than good working order.
- a-2. Remove it from its installed location, unless a functioning replacement detector has previously been installed.
- a-3. Remove batteries, except to immediately replace them.
- b. No tenant, co-tenant or any other person may suffer or permit, or by inefficient control allow any violation of par. a.

CHAPTER 236 HAZARDOUS OCCUPANCIES

236-01. Adoption of State Code. Except as otherwise provided in this chapter, the city of Milwaukee adopts chs. SPS 310, 340 and 343, Wis. Adm. Code, as amended, as part of this code.

CHAPTER 251 FIRE PROTECTION SYSTEMS

251-1. Adoption of State Code. Except as otherwise provided in this chapter, the city of Milwaukee adopts s. SPS 361.05, Wis. Adm. Code, as amended, and ss. 145.01 (1), (2), and (4), 145.15(4), 145.165, and 145.175, Wis. Stats., as amended, as part of this code.

251-9. Fire Department and First Aid Standpipe Systems.

- 1. CONTROL VALVES. Standpipe control valves shall be located no higher than the first story and shall be properly identified.
- 2. CONNECTION TO DOMESTIC WATER SUPPLY. Where a fire protection standpipe connection to a domestic water supply is permitted, it shall be made after the water meter and ahead of the first domestic branch, unless otherwise approved by the commissioner of city development. The connection shall be equipped with an approved indicating valve, a backflow protection device, a pressure gauge and a drain valve.

251-11. Automatic Fire Sprinkler Systems.

1. WATER SUPPLY.

- a. General Requirements. Water supply connections, piping, and tanks shall be installed according to Milwaukee water works regulations. Recessed indicating valves shall be prohibited. Sprinkler systems containing a total of 20 or fewer sprinkler heads may be connected to domestic water piping if adequate pressure and flow are available.
- b. Connection to Domestic Water Supply. Where a sprinkler system connection to a domestic water supply is permitted, such connection shall be made after the water meter and ahead of the first domestic branch, unless otherwise approved by the commissioner of city development. The connection shall be equipped with an approved indicating valve, a backflow protection device, a pressure gauge and a drain valve.

2. SPRINKLER ALARMS.

- a. Installation. The sprinkler contractor shall be responsible for the installation of an alarm bell and identification sign.

b. Location. The alarm bell, identification sign and fire department connection may be located only on an exterior building wall which fronts on a street. These items shall be located in close proximity to one another, so that the alarm will indicate the location of the fire department connection to the fire department.

Note: See s. 236-11-4-d-2 for the fire protection requirements for spray booths.

Note: See NFPA 25 for sprinkler head replacement requirements.

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Sec. 15-4-2 General Provisions.

(b) Application of Code.

(1) The provisions of this Chapter apply equally to new and existing conditions except that existing conditions not in strict compliance with the terms of this Chapter shall be permitted to continue where the exceptions do not constitute a distinct hazard to life or property in the opinion of the Chief.

Sec. 15-4-5 Adoption of State Codes.

(a) Except as otherwise specifically provided in this Chapter, the following orders, rules and regulations of the Department of Industry, Labor and Human Relations, as set forth in the Wisconsin Administrative Code, are adopted by reference and made a part of this Fire Prevention Code as if fully set forth herein. Any act required to be performed or prohibited by a statute incorporated herein by reference is required or prohibited by this Fire Prevention Code. Any future amendments, revisions or modifications of the Wisconsin Administrative Code are intended to be made a part of this Chapter and are hereby incorporated herein as if fully set forth.

(b) Except as otherwise specifically provided, those portions of the National Fire Codes published by the NFPA, Boston, Massachusetts, and other codes and standards, as listed in the following pages, are hereby incorporated by reference and adopted as a part of this Fire Prevention Code. Any future amendments, revisions, or modifications of the NFPA Codes adopted herein are intended to be made part of this Chapter and are hereby incorporated as if fully set forth herein.

(c) In the event that any of the foregoing Orders, Rules and Regulations of the Department of Industry, Labor and Human Relations or National Fire Code conflict with any provisions of this Chapter or with one another, the most strict shall apply.

Sec. 15-4-6 Automatic Fire Sprinkler Systems Required.

Approved automatic fire sprinkler systems shall be installed and maintained as follows:

(f) Nursing, Convalescent, Old Age, Prison, Group Care and Other Institutional Facilities. Throughout all nursing, convalescent, old age, prison, and other group care or inscriptional facilities.

(h) High Hazard Occupancies. Throughout any building which by reasons of its construction, use or high combustible occupancy, involves a severe life hazard to its occupants, or which in the judgment of the Chief constitutes a fire hazard, including, but not limited to:

(1) Aircraft hangers.

- (2) Dry cleaning establishments using or storing gasoline or other volatile flammable liquids.
- (3) Enameling or japanning operations.
- (4) Mills, including sugar, starch, cereal, feed, flour and grist.
- (5) Paint and varnish, including manufacturing, storing, handling, spraying and other related operations.
- (6) Pyrozylin products, manufacture and storage.
- (7) Repair garages.
- (8) Smokehouses.
- (9) Storage of explosive gases under pressure [fifteen (15) p.s.i. and over five thousand four hundred (5,400) cubic feet] such as acetylene, hydrogen, natural gas, etc.
- (10) Storage of materials with a flash point under two hundred degrees Fahrenheit (200°F) such as celluloid products, kerosene, fuel oil, etc.
- (11) Woodworking establishments.
- (12) Chemical works.
- (13) Explosives and pyrotechnics manufacturing.
- (14) Oil refineries.
- (15) Any other occupancies involving processing, mixing, storage and dispensing of volatile liquids.

(j) Exceptions. Automatic fire sprinkler systems shall not be required in:

- (1) Certain Manufacturing Areas. Rooms or building used for the manufacturer or storage of aluminum powder, calcium carbide, calcium, metallic sodium or potassium, quick lime, magnesium powder, sodium peroxide or like materials where the application of water may cause or increase combustion.
- (2) Where Water Would Increase Hazard. Any location where, in the sole discretion of the Chief, the use of water as a fire extinguishing agent would increase hazards or unduly expose equipment, machinery, or other chattel to damage or destruction provided, however, that an automatic fire suppression system using an extinguishing location is connected to an approved Central Station Monitoring service.

Sec. 15-4-7 Installation and Inspection of Automatic Fire Sprinklers.

(a) Installation Standards.

- (1) Approved automatic fire sprinkler equipment shall be installed in accordance with the current editions of Pamphlet No. 13, "Standards for the Installation of Sprinkler Systems", and other applicable standards of the National Fire Protection Association.

(c) Specific System Requirements.

(1) System Drain. The building automatic sprinkler system shall have a drain piped to the outside of the building or to a drain suitable to handle the required flows.

(2) Inspector's Test Valve. The building automatic sprinkler system shall have an inspector's test valve piped so as to discharge to the outside of the building. The inspector's test valve shall be mounted at the most hydraulically remote location of the system. An orifice equal to the discharge of one (1) sprinkler alarm shall be tied into the building alarm system.

(3) Alarm Bell. Alarm bells shall be installed on all alarm systems. One (1) bell shall be installed on the outside of the building. The sprinkler alarm shall be tied into the building alarm system.

Sec. 15-4-8 Alarm Systems (Fire and Smoke Detection).

(b) Where Required. Smoke and heat detection systems shall be installed in all spaces in all buildings regardless of size or construction except for one (1) and two (2) family dwellings. The detection systems shall be in all spaces, including but not limited to hidden spaces (e.g., attics, crawlspaces, truss constructed areas), basements, storerooms, closets, occupied and unoccupied areas. One (1) and two (2) family dwellings shall have smoke detection systems as required by Wisconsin Administrative Code.

(c) Monitoring. All detection systems shall be monitored by an approved central station monitoring service, except for one (1) and two (2) family dwellings.

(d) Installation.

(1) All components of a fire or smoke detector system shall be listed by Underwriters Laboratories (UL) or the Factory Mutual System (FM). The entire installation shall conform to applicable provisions of NFPA Standards 71, 72A, 72C, 72D, or 72E, the National Electrical Code Article 760, and the Wisconsin Electrical Code.

(3) A remote annunciator shall be provided at the main entrance of the building to indicate each of the designated alarm initiating zones via Red LED's which flash when in alarm and lock in upon acknowledging the alarm. The remote annunciator shall be electrically supervised from the main fire alarm control panel. Space shall be provided on the remote annunciator for custom zone labels. The zone labels shall plainly describe the location of the zones. Different occupancies in one (1) building shall be zoned separately.

(5) External devices:

a. The system shall utilize UL or FM listed fire alarm initiating devices (pull stations, smoke detectors, heat detectors, water flow switches, duct detectors, etc.) and UL and FM listed fire alarm indicating devices (horns, bells, visual lights, etc.). Smoke detectors shall possess a Light Emitting Diode (LED) lamp to indicate either "ready" or "alarm" status.

b. Smoke detectors (photoelectric, ionization) shall be installed approximately thirty (30) feet on center, located on the ceiling or wall of the protected area. Smoke detection shall be provided but not limited to the following areas: basements, common hallways, stairwells, sleeping rooms and all other rooms over fifty (50) square feet in size.

c. Heat detectors shall be installed approximately thirty (30) feet on center, located on the ceiling of the protected area. Heat detection shall be provided but not limited to the following areas: furnace rooms, engine rooms, garages, hidden spaces and kitchens and all other rooms over fifty (50) square feet in area. Heat detectors shall also be installed as a substitution for

smoke detectors in locations determined by the Fire Chief to be unsuitable for smoke detector installation.

d. Horns/Bells:

1. Alarm System Horns: Horns used as the audible alarm indicating appliance shall be twenty-four (24) volt direct current (DC) horns of metal construction with a minimum sound pressure output of eighty-seven (87) db at ten (10) feet. Fire alarm horns shall be UL or FM listed for fire alarm use. Horns shall be adaptable for surface or semi-flush mounting and be suitable for use within combination audio-visual systems.

2. Alarm System Bells: Bells used as the audible alarm indicating appliance shall be twenty-four (24) volt DC bells of the vibrating or single stroke type with a minimum sound pressure output of ninety (90) db at ten (10) feet. Bells shall be suitable for surface or semi-flush mounting and be suitable for use within combination audio-visual systems.

3. Visual Flashing Lamps: Visual indicating appliances shall be comprised of a strobe-type flash tube and be entirely solid state. These devices shall be UL or FFM listed and be capable of either ceiling or wall mounting. Visual units shall incorporate a built-in reflector to improve lighting characteristics. Visual units shall be incorporated as part of the horn or bell assembly.

4. Horns, bells, or visual flashing lamps shall be installed in each unit, living space or tenant space in the building.

(e) System Operation.

(1) Alarm initiating devices shall be grouped in zones identified by zone LED's on the control panel and at the remote annunciator.

(2) Actuation of an alarm initiating device shall:

a. Cause the respective red zone alarm LED on the control panel to flash until the "acknowledge" switch is actuated at the control panel. Once acknowledged, the zone LED shall be constantly illuminated until the actuating device is restored to normal and the system is reset or equivalent operation.

b. The audible alarm indicating appliance shall sound throughout the entire facility until the system alarm acknowledge/silence switch is operated.

c. Visual indicating appliances shall flash until the acknowledge//silence switch is operated.

d. After the acknowledge switch is operated, subsequent activation of an initiating appliance shall cause the alarm bells or horns to resound, and the visual indicating appliances to flash.

(3) Each alarm initiating circuit and indicating appliance circuit shall be electrically supervised. Any disarrangement of system wiring such as opens and grounds shall activate the audible and visual trouble indicators at the control panel. Actuation of the trouble silence switch shall silence the audible trouble indicator but the trouble LED shall remain lit. The trouble LED shall be noncanceling, except by an actual clearing of the trouble condition and restoring the trouble silence switch to normal.

(4) The alarm system shall provide for the selection of:

- a. Desire type of signal operation; alarm signal tempos, area selective codes, zone codes, general alarm codes and alarm silence inhibit.
- b. UL or FM approved alarm verification operation.
- c. Water flow/sprinkler supervisory operation on a distinct zone of the system.

(5) Upon actuation of a smoke detector, the LED on the smoke detector shall remain constantly illuminated until the system is reset.

Sec. 15-4-9 Existing Buildings.

(a) Except as hereinafter provided, automatic fire sprinklers, smoke detectors and standpipes need not be installed in buildings which existed or were under construction before this Chapter became effective unless such installation was required by a previous ordinance, administrative regulation, or state statute.

(b) Where a building is expanded or remodeled and the building as remodeled or expanded is of a size, is of a type, or is for a use which, were the building then to be constructed, would be subject to the provisions of Sections 15-4-6, 15-4-8 and/or 15-4-10.

(1) The entire building (existing, new and remodeled areas) shall be made to conform to the requirements of Sections 15-4-6, 15-4-8 and 15-4-10 if more than fifty percent (50%) of the gross interior area of the building is remodeled or added to the building.

(4) In determining the foregoing percentages successive additions, expansions, or remodeling, if made within a five (5) year period shall be aggregated and treated as a single expansion or addition.

(c) Regardless of any percentage test set forth in Subsection (b), if the additional expanded or remodeled area is of a size, is of a type, or is for a use which is subject to the provisions of Section 15-4-6, 15-4-8 and 15-4-10 the additional, expanded, or remodeled area must conform to the requirements of such Sections.

(d) Where at the time of its construction a building or any part thereof is exempt from the requirements of Section 15-4-6 by reason of its proposed or intended use and subsequent to construction the use of such building or part thereof is changed in such a way that the reason for the exemption no longer exists, the entire building or area as the case may be shall be made to conform to the requirements of

(e) If the use of an existing building or structure is changed and the requirements for the new use are more stringent than those for the previous use, the building or structure shall be made to comply with the requirements for the new use as provided in this Chapter.

Sec. 15-4-16 High Rise Buildings.

(c) Stairway Doors and Telephones. Doors from stairways to floors may be locked only if provided with a remote release system from building control station. Stairways shall have a telephone or intercom to the building control station at least every five (5) floors, if kept located. Locks must release on power failure, with doors remaining unlocked.

(e) Automatic Sprinkler and Standpipe Systems.

(1) An automatic sprinkler system shall be installed in accordance with NFPA 13.

(2) A standpipe system shall be installed in accordance with NFPA 14.

(3) Shut-off valves and water flow detection devices for the standpipe and sprinkler systems shall be provided for each floor.

(4) Standpipe and sprinkler valves shall be supervised by a continuously manned station or central station.

(f) Smoke/Heat Detection Systems.

(1) At least one (1) approved smoke detector, suitable for the intended use shall be installed:

a. Within every mechanical equipment, electrical transformer or control telephone equipment, elevator machine, or similar room.

b. Within the main return and exhaust air plenum of each air conditioning system and located in a serviceable area down stream of the last duct inlet.

(2) These detectors shall activate an alarm or signaling system and shut down the ventilation system except where automatic smoke control is incorporated in the system.

(3) Approved heat detection equipment shall be installed in boiler rooms and furnace rooms in lieu of smoke detection equipment.

(4) Alarm systems installed within such buildings shall conform to the Wisconsin State Electrical Code and one (1) of the following standards: NFPA 71, 72B, 72C, 72D.

(5) Detectors shall conform to the Standards for Automatic Fire Detectors NFPA 72E. Alarm and Communications Systems.

(6) The alarm and communications systems shall be designed and installed so that damage to any terminal unit or speaker will not render more than one (1) zone of the system inoperative.

(g) Voice Alarm System.

(1) The operation of any smoke detector, water flow device or manual fire alarm station shall automatically sound an alarm signal to the desired areas, followed by voice direction to the occupant. The voice alarm and public address system may be a combined system. When approved, the Fire Department communications system may be combined with the voice alarm system and the public address system.

(2) The central control station shall contain controls for the voice alarm system so that a selective or general voice alarm may be manually initiated.

(3) The system shall be supervised to cause the activation of an audible trouble signal in the central control station upon interruption or failure of the audiopath including amplifiers, speaker wiring, switches and electrical contacts and shall detect opens, shorts and grounds which might impair the function of the system.

(4) The alarm shall be designed to be heard clearly by all occupants within the building or designated portions thereof as is required for the public address system.

(h) Public Address System. A public address communications system designed to be clearly heard by all occupants of the building shall operate from the central control station. It shall be capable of directing message selectively or on a general basis to the following terminal areas:

(1) Elevators.

- (2) Elevator lobbies.
- (3) Corridors.
- (4) Exit stairways.
- (5) Rooms and tenant spaces exceeding one thousand (1,000) square feet in area.
- (6) Dwelling units.
- (7) Hotel guest rooms and/or suites.

(i) Fire Department Communications System. A central control station for Fire Department operations shall be provided in a location approved by the Fire Department. This station shall contain:

- (1) Voice alarm and public address system control panels.
- (2) Two (2) way communications between the control stations and all elevators, elevator lobbies, exit access and stairways at each floor. The type of equipment proposed for this function shall be approved by the Fire Department.
- (3) Fire detection and alarm system annunciator panels.
- (4) Annunciator visually indication the location and status of each elevator.
- (5) Status indicators and controls for air-handling systems.
- (6) Controls for unlocking all stairway doors simultaneously.
- (7) Sprinkler valve and water flow detector display panels.
- (8) Standby power controls and status indicators.
- (9) A telephone for Fire Department use with controlled access to the public telephone system.
- (10) Manual override control for elevators.
- (11) Small scale layout plan of building showing all permanent partitions, identifying permanent areas and doorways, exterior wall openings suitable for use in smoke ventilation, elevator locations and stair locations.
- (12) Diagrams to indicate the location of the main shutoff for sprinkler or standpipe systems, electrical, water, gas and steam systems with an indication of the area(s) served by each of these main shutoffs.
- (13) A list of names indicating all key building operating personnel and where they may be reached.
- (14) An emergency plan of action for the building with personnel responsibilities defined.

(j) Standby Power and Lighting.

- (1) An approved, permanently installed standby power generating system shall be provided. The system shall be equipped with suitable means for automatically starting the generator set upon failure of the normal electrical service and for automatic transfer and operations of the required electrical functions at full power within sixty (60) seconds of such normal service failure. System supervision with manual start and transfer features shall be provided at the central control station.

(2) An on-premise natural gas fuel supply, or other fuel approved by the Department, sufficient for not less than twelve (12) hours full demand operation of the system shall be provided.

(3) The power requirement shall be determined so as to provide service to, but not limited to:

- a. Fire alarm system.
- b. Exit and other emergency lighting.
- c. Fire protection equipment.
- d. Mechanical ventilation equipment.
- e. Elevators.
- f. Communications systems.

. Maintenance: All communications, fire protection, detection and suppression systems required under this Section, shall be tested and maintained in an operable condition. All installed equipment required under this Section shall be maintained pursuant to the current standards of the National Fire Protection Association (NFPA). Floor level identification.

(4) All stairways shall have each floor level or story identified on both sides of the door leading to the stairway as to its name or number with a permanent sign having letters or characters at least two (2) inches in height.

(5) All elevators shall have each floor level or story identified on both sides of the door leading to the elevator shaft as to its name or number with a permanent sign having letters or characters at least two (2) inches in height.

Mt. Pleasant

Sec. 34-1. Fire prevention codes and statutes adopted.

(a) For the purpose of prescribing regulations governing conditions hazardous to life and property from fire or explosion arising from the storage, handling and use of hazardous substances, materials and devices and from conditions hazardous to life and property in the use or occupancy of buildings or premises, and the safeguarding of firefighting personnel as it relates to job requirements, duties, medical and physical conditions, the following orders, rules and regulations of the department of commerce, all of which are set forth in the Wisconsin Administrative Code as amended from time to time, and the Wisconsin Statutes that may apply to the fire service, and the Codes and Standards and Recommended guides as set forth by the National Fire Protection Association as amended from time to time amended, and as they apply to the fire service, are incorporated in this section by reference and adopted as part of this section:

- (1) Wis. Admin. Code ch. Comm. 7, Explosives and Blasting Agents.
- (2) Wis. Admin. Code ch. Comm. 10, Flammable and Combustible Liquids.
- (3) Wis. Admin. Code ch. Comm. 14, Fire Prevention.
- (4) Wis. Admin. Code ch. Comm. 15, Cleaning and Dying.
- (5) Wis. Admin. Code ch. Comm. 30, Fire Department Health and Safety Standards.

(6) Wis. Admin. Code ch. Comm. 43, Anhydrous Ammonia Code.

(7) Wis. Admin. Code ch. Comm. 66, Multifamily Dwelling: (a) Wis. Stats

(8) NFPA Codes and Standards, Volumes 1--12.

(b) Whenever the provisions of the codes or statutes set forth in subsection (a) of this section conflict, the stricter interpretation shall apply.

Sec. 34-122. Installation and maintenance.

Approved automatic fire sprinkler equipment shall be installed and maintained in the following types of facilities:

(4) Government buildings;

Sec. 34-124. Accessory buildings requiring protection.

Approved automatic fire sprinkler equipment shall be installed and maintained in accessory buildings and special principal building areas, as follows:

(1) *Garages*. In garages, as follows:

a. Garages within, attached to, above or below other occupancies.

b. Garages used as passenger terminals.

(4) *Day care centers, including adult day care centers*. All day care center, including adult day care center, buildings, regardless of size, shall have complete sprinkler protection throughout as per NFPA 13.

(5) *Community based residential facilities (CBRF)*. All CBRF buildings, regardless of size, shall have sprinkler protection throughout as per NFPA 13.

(6) *Theaters and assembly buildings*. Theater and assembly buildings shall have sprinkler protection throughout all buildings as per NFPA 13.

(7) *Hospitals, nursing, convalescent, old age and other similar institutional buildings*. Hospitals, nursing, convalescent, old age and other similar institutional buildings shall have sprinkler protection throughout all buildings of nonfire resistive construction as per NFP A 13.

(8) *Schools, colleges and universities*. Schools, colleges and universities shall have sprinkler protection throughout all buildings of nonfire resistive construction as per NFPA 13.

(9) *Dormitories, fraternities and sorority houses*. Dormitories, fraternities and sorority houses shall have sprinkler protection throughout all buildings as per NFPA 13.

(10) *Hotels, motels and roominghouses*. Hotels, motels and roominghouses shall have sprinkler protection throughout all buildings of nonfire resistive construction as per NFPA 13.

(11) *Commercial, industrial and institutional garages and service centers*. Any commercial, industrial and institutional garage and service center building with a total area of 3,000 square feet or greater shall have sprinkler protection. NFPA 13 shall apply.

Sec. 34-125. Buildings with high hazard occupancy requiring protection.

When it is expected there will be a high hazard occupancy, approved automatic fire suppression equipment shall be installed and maintained in newly constructed buildings, including, but not limited to:

- (1) Aircraft hangers;
- (2) Chemical works and/or storage facilities;
- (3) Dry cleaning establishments using or storing gasoline or other volatile flammable liquids;
- (4) Enameling or Japanning operations;
- (5) Explosive and pyrotechnics manufacturing;
- (6) Manufacture and storage of pyroxylin products;
- (7) Oil refineries;
- (8) Paint and varnish manufacturing, storing, handling, spraying and other related operations;
- (9) Paint stripping establishments;
- (10) Smokehouses;
- (11) Storage of explosive gases under pressure (15 psi and over 5,400 cubic feet), such as acetylene, hydrogen and natural gas;
- (12) Storage of materials with a flash point under 200 degrees Fahrenheit, such as celluloid products, kerosene, etc.;
- (13) Sugar, starch, cereal, feed, hay, flour and grist mills;
- (14) Woodworking and other such establishments with combustible dust.

Sec. 34-126. Additions, remodeled buildings and change of use.

All public buildings or places of employment existing on the effective date of the ordinance from which this section is derived and all additions shall conform to this article, as follows:

- (1) *More than 50 percent remodeled or added.* If more than 50 percent of the gross area of a building is remodeled and/or added, the entire building shall be in conformance with the requirements of this article.
- (4) *Total percentages added together.* If percentages remodeled or added are done from the date of the ordinance from which this article is derived forward, all percentages are added together every time to get the total percentages remodeled or added.
- (5) *Change of use.* If the use of a building existing on the date of the ordinance from which this article is derived is changed to a new use, the building shall be made to comply with this chapter.

Sec. 34-128. Method of installation.

- (a) Approved fire suppression systems shall be installed in accordance with current National Fire Protection Association (NFPA) standards and/or recommended practices which are applicable.
- (b) All fire sprinkler systems shall use hydrant water flow test data which is dated no more than six months prior to the submission of the sprinkler plans for review. The data shall be obtained during peak water demand conditions, and conducted in such a manner that it represents true orientation (direction of flow) of the supply to the system being designed.
 - (2) A system of heat and smoke detectors, monitored 24 hours per day, shall be installed.
 - (3) Within 90 days after a municipal water supply becomes available, the sprinkler system shall be connected to the municipal water supply.
- (c) All sprinkler system designs shall be based on no more than 90 percent of the available water supply. A minimum safety factor of ten percent shall be maintained.
- (d) All fire suppression systems shall be installed in accordance with all applicable state codes.
- (e) The location of all fire department connections shall be approved by the fire chief.
- (f) Audible alarm bells are required inside and outside of all buildings.

Mukwonago

Sec. 38-32. - Automatic fire sprinkler protection.

Installation required. An automatic fire sprinkler system shall be installed in all structures where the floor area exceeds the thresholds established in Table 38-12(2) of the specific occupancy involved. For the purpose of determining square footage as it relates to the sprinkling of a building, firewalls shall not be considered area dividers unless the firewall is built in compliance with section 705 of the CBC.

Occupancy					
Type	Type I	Type II	Type III	Type IV	Type V
E*	All	All	All	All	All
F2	5,000 SF	5,000 SF	3,000 SF	3,000SF	3,000 SF
I-2	All	All	All	All	All
I-3	All	All	All	All	All
I-4	All	All	All	All	All
R-4	All	All	All	All	All
U	5,000 SF	5,000 SF	3,000 SF	3,000 SF	3,000 SF

* Excludes single-family home day cares

(3) *[Additional provisions.]* In addition an automatic sprinkler system shall be installed in all:

- (a) Parking structures above and below ground with ceilings.
- (b) CBRFs (community based residential facilities).
- (c) Adult family homes.
- (d) Throughout every building, new or existing, which by reason of its construction or combustible occupancy involves a life hazard to its occupants or in the judgment of the AHJ constitutes a fire menace.

(4) *Miniwarehouses and unattached multifamily parking garages.* Throughout all buildings provided that they contain:

- (a) Five thousand square feet or more in area on any floor or exceeding two stories.
- (b) Any portion that the floor is below grade level.

(6) *Dormitories, fraternities and sorority houses.* Throughout all buildings.

(7) *When a sprinkler system is required by this chapter.* When a sprinkler system is required by this chapter but not the Department of Safety and Protective Services, at a structure that is not currently serviced by a municipal water source:

- (b) Within 90 days after a municipal water system becomes available, the sprinkler system shall be connected to the municipal water supply.

(8) *All automatic fire sprinkler systems shall:*

- (a) Be monitored in accordance with NFPA 72.
- (b) Have sprinkler control rooms located with adequate access for fire department, sprinkler maintenance and inspection personnel and shall not be located within private dwellings with the exception of NFPA 13D systems.
- (c) Have direct access from the exterior to the sprinkler control valve as determined by the AHJ.
- (d) Have working drawings prepared in accordance with NFPA 13.
- (e) Have a bell (minimum ten-inch) and strobe located above the FDC in accordance to NFPA 13.
- (f) The FDC must be at least 40 feet from all gas meters, electrical meters and transformers.
- (g) Be designed for the hazard being protected or as specifically specified in this code and/or as directed by the AHJ.
- (h) All automatic fire sprinkler systems hydraulic designs are to be based on 90 percent available water supply (ten percent safety margin shall be maintained). All sprinkler systems designed shall be based on the most current approved water flow test conducted in accordance with NFPA 291.

(10) *Application to existing buildings.*

- (a) Adult family homes and CBRFs regardless of number of occupants or class must be retrofitted with sprinkler protection acceptable to the AHJ.
- (b) Where the AHJ finds that an existing building, because of current occupancy or a change in occupancy constitutes a hazard to its occupants or adjoining property, the AHJ may order compliance with the provisions of this section. A hazard shall be determined by the existence of one or more of the following conditions:
 - 1. Any building which by reason of its construction or highly combustible occupancy involves a hazard to its occupants or, in the judgment of the AHJ, constitutes a fire

menace, e.g., paint shop and other occupancies involving processing, mixing, storing, and dispensing of volatile liquids or solids.

2. Non-fire-resistive characteristics of a structure.
3. Accumulation of flammable or combustible materials.
4. Lack of accessibility to the premises for fire-fighting equipment.
5. Substantial number of fire calls or complaints on the premises.
6. Traffic patterns for pedestrian ingress and egress which require protection under this section.
7. Insufficient ventilation system.
8. Lack of an internal communication system, or due to the size or type of building making regular fire department radio communication inoperable, the building owner is required to install a repeater system or something comparable to assist radio communications.
9. Number, characteristics and movement of employees which require protection under this section.

(c) Installation of an automatic sprinkler system must be started within one year from the service of such orders and shall be completed within 180 days after construction has started.

(11) *Fire sprinkler control valve access.*

(a) All structures that have automatic sprinkler systems shall comply with the following:

1. Have sprinkler control rooms located with adequate access for fire department, sprinkler maintenance and inspection personnel.
2. Shall not be located within private dwellings with the exception of NFPA 13D systems.
3. Have direct access from the exterior to the sprinkler control valves that is acceptable to the AHJ.

(b) Exceptions. Any location where the installation of sprinklers may cause or increase an occupational hazard as determined by any governmental AHJ over such location or occupation.

Sec. 38-33. - Automatic fire protection for cooking areas.

(2) *Installation requirements.*

- (c) The system shall be provided with automatic fuel shut-off.
- (d) A Class K fire extinguisher shall be installed per NFPA 10
- (e) Alarms shall be connected to the fire alarm system per NFPA 72.
- (f) Cooking equipment used in processes producing smoke, or grease-laden vapors shall be equipped with an exhaust system that complies with all the equipment and performance

requirements of NFPA 1 and NFPA 96, and all such equipment and performance shall be maintained per NFPA 96 during all periods of operation of the cooking equipment.

Sec. 38-34. - Miscellaneous construction provisions.

(3) *Fire alarm systems.*

(b)

TABLE 38-14(4)(b)

Occupancy

Type	Type I	Type II	Type III	Type IV	Type V
E*	All	All	All	All	All
I-2	All	All	All	All	All
I-3	All	All	All	All	All
I-4	All	All	All	All	All
R-3	State Statutes apply				
R-4	All	All	All	All	All
S-1	3,000 SF	3,000 SF	3,000 SF	3,000 SF	3,000 SF
S-2	5,000 SF	5,000 SF	3,000 SF	3,000 SF	3,000 SF
U	5,000 SF	5,000 SF	3,000 SF	3,000 SF	3,000 SF

*Excludes single-family home day cares

(c) *Minimum system requirements.* The following minimum system requirements shall be met when any occupancy type exceeds the limits in Table 38-14(4)(b). Minimum system requirements shall include:

1. Audible notification appliances shall be installed throughout protected premises.
2. Visible notification appliances shall be installed throughout protected premises.

Exceptions:

- a. Closets and/or other similar small storage rooms that do not exceed 50 square feet in floor area and are not normally occupied.
 - b. Normally unoccupied crawl spaces.
 - c. Normally unoccupied attic spaces.
 - d. Any nonaccessible area.
 - e. Any area the AHJ deemed visible notification appliances are not required.
4. Manual initiating devices (pull stations) shall be located at all points of egress including all exit doors on every floor and/or building level.
 5. Water flow detection devices shall be connected to the protected premises fire alarm system to specifically activate the notification appliances upon water flow.
 6. Fire suppression system activation alarms shall be connected to the protected premises fire alarm system to specifically activate the notification appliances upon system activation. This includes, but is not limited to, wet chemical, CO₂, clean agent, water mist and dry chemical systems.

7. Fire control and/or suppression systems supervisory condition indicators shall be connected to and monitored by the protected premises fire alarm system. This specifically includes, but is not limited to, valve supervisory switches (tamper switches), low air switches, low water switches, low temperature switches, fire pump condition indicators and/or any other situation or condition deemed necessary by the AHJ.
8. Fire alarm systems shall be addressable and capable of indicating the status of all specific components connected to the system.
9. All fire alarm systems shall be monitored by a service acceptable to the AHJ.
10. Fire alarm annunciators shall be installed in all protected premises. The number and locations of the fire alarm annunciators installed shall be acceptable to the AHJ.
11. As determined by the AHJ, any additional notification and/or initiation appliances/devices may be required due to size, occupancy hazards, building construction, and/or occupancy use.

(f) *Special requirements.* On all buildings over four stories in height, a fire command center for fire department operations shall be provided. The fire command center shall comply with NFPA 72 and shall contain the features required in the International Fire Code and NFPA 1, 13.7.2.27.2.2.

1. Two-way telephone communication service shall be provided for the fire department use. This system shall be in accordance with NFPA 72. The communications system shall operate between the central control station and every elevator car, every elevator lobby, and each floor level of exit stairs.
2. The requirements of NFPA 1, 13.7.2.27.2.2(A) shall not apply where the fire department radio system is approved as an equivalent system. [NFPA 101, 11.8.3.2.]

(12) *Standpipes.* Fire department standpipes shall be provided in all new structures over two stories in height and in accordance with this section. The installation of standpipes shall be in accordance with this section and NFPA 14.

- (b) The location of standpipe connections shall be accessible and shall be located so that all portions of the building are within 30 feet of a nozzle attached to 100 feet of hose.
- (c) When required by the AHJ, an approved standpipe shall be installed as construction progresses to make them available for fire department use in the topmost floors constructed. Temporary standpipes shall be provided in place of permanent standpipes when required, during the period of construction on buildings over three stories in height.
- (d) The fire department connections for the standpipe shall be approved by the AHJ.
- (e) The fire department connections shall be located at least 40 feet from all electrical transformers, gas meters, or propane storage.
- (f) Temporary standpipes are required on buildings over three stories in height.

New Berlin

124-1. General provisions.

B. Scope.

(1) General. The provisions of this chapter shall apply to all public buildings and places of employment.

(2) Exempt buildings. The following buildings and uses are not public buildings or places of employment and are not subject to the provisions of this chapter:

(a) One- and two-family dwellings and outbuildings in connection with the dwellings including, but not limited to, barns and private garages.

(b) Buildings used exclusively for farming as described in § 102.04(3), Wis. Stats.

(c) Temporary buildings used exclusively for construction purposes, not exceeding one story in height and not used as living quarters.

(3) Exceptions. Nothing contained in this subsection shall be construed as applying to the transportation of any article or things shipped in conformity with the regulations prescribed by the Department of Transportation or as applying to the military forces of the United States.

C. Application.

(1) The provisions of this chapter shall apply equally to public and private property. They shall apply to all structures, whether existing or new, and they shall apply to the owner of the property as well as the occupant.

(2) The provisions of this chapter shall apply equally to new and existing conditions, except that existing conditions not in strict compliance with the terms of this subsection shall be permitted to continue where the exceptions do not constitute a distinct hazard to life or adjoining property or have been superseded by this chapter.

D. Additions; remodeled buildings. All inspectable occupancies shall adhere to the following:

(1) If more than 50% of the interior area of the building is remodeled and/or added to, the entire building shall be brought into compliance with the requirements of this chapter.

(3) If the use of any existing building is changed and becomes more hazardous as determined by the Fire Prevention and Inspection Bureau, the building shall be brought into compliance with this chapter.

124-3. Adoption of state fire prevention regulations.

A. Any and all codes and statutes of the State of Wisconsin relating to fire prevention or life safety as they are from time to time amended are adopted by reference and incorporated into this chapter as if fully set forth herein. Any violation of the incorporated provisions constitutes a violation of this chapter.

B. Effective December 2011, any secondary references found in the International Codes, as adopted by § SPS 361.05, Wis. Adm. Code, are hereby adopted by reference and incorporated into this chapter.

124-4. Adoption of NFPA Standards.

A. Any violation of the incorporated provisions constitutes a violation of this chapter:

NFPA 11 Foam Extinguishing Systems, Low Expansion

NFPA 11A Foam Extinguishing Systems, Medium and High Expansion

NFPA 12	Carbon Dioxide Extinguishing Systems
NFPA 12A	Halon 1301 Fire Extinguishing Systems
NFPA 13	Sprinkler Systems, Installation of
NFPA 13D	Sprinkler Systems in One- and Two-Family Homes
NFPA 13R	Sprinkler Systems in Residential Occupancies up to Four Stories in Height
NFPA 14	Standpipe, Private Hydrant and Hose Systems
NFPA 15	Water Spray Fixed Systems
NFPA 16	Deluge Foam-Water Sprinkler and Spray Systems
NFPA 17	Dry Chemical Extinguishing Systems
NFPA 17A	Wet Chemical Extinguishing Systems
NFPA 25	Water Based Fire Protection Systems
NFPA 30	Flammable and Combustible Liquids Code
NFPA 30A	Motor Fuel Dispensing Facilities
NFPA 33	Spray Application Using Flammable and Combustible Materials
NFPA 34	Dipping and Coating Processes Using Flammable or Combustible Liquids
NFPA 45	Fire Protection for Laboratories Using Chemicals
NFPA 50	Bulk Oxygen Systems at Consumer Sites
NFPA 50A	Gaseous Hydrogen Systems at Consumer Sites
NFPA 50B	Liquefied Hydrogen Systems at Consumer Sites
NFPA 51B	Welding, Cutting, Other Hot Work
NFPA 69	Explosion Prevention System
NFPA 72	National Fire Alarm Code
NFPA 80	Fire Doors and Windows
NFPA 92A	Smoke Control Systems
NFPA 96	Cooking Equipment, Vapor Removal
NFPA 105	Smoke-Control Door Assemblies
NFPA 204	Smoke and Heat Venting

NFPA 230	Fire Protection of Storage
NFPA 291	Hydrants, Flow Testing and Marking
NFPA 329	Flammable and Combustible Liquids, Handling Releases of
NFPA 385	Flammable and Combustible Liquids, Tank Vehicles for
NFPA 386	Flammable and Combustible Liquids, Portable Shipping Tanks
NFPA 430	Flammable and Combustible Liquids, Portable Shipping Tanks
NFPA 654 Particulate Solids	Prevention of Fire and Dust Explosions from Manufacturing Combustible
NFPA 1123	Fireworks Display
NFPA 1124	Fireworks and Pyrotechnic Articles
NFPA 1142	Water Supplies for Suburban and Rural Fire Fighting
NFPA 1961	Fire Hose
NFPA 1962	Fire Hose, Care, Use and Service Testing
NFPA 1963	Fire Hose Connections, Storage of

B. Effective December 2011, any referenced standard found in Chapter 32 and Appendix S of NFPA 1, Fire Code® - 2009, as adopted by § SPS 314.001, Wis. Adm. Code, that are not already adopted by this chapter are adopted by reference.

C. Any issue not addressed by this chapter or included standards will be addressed on the basis of current accepted NFPA standards or other nationally accepted standards.

D. The most recent update to NFPA standards will automatically be adopted by this chapter.

124-10. Modifications.

B. The particulars of such modifications when granted or allowed and the decision of the Assistant Chief in charge of the Fire Prevention and Inspection Bureau thereon shall be entered upon the records of the Department, and a signed copy shall be furnished to the applicant.

C. The Fire Chief may require tests as proof of compliance with the intent of this chapter, such tests to be made by an approved agency at the expense of the person requesting approval of the alternate material or method of construction.

D. If technical expertise is unavailable within the City of New Berlin Fire Department because of new technology, process, products, facilities, materials and uses attending the design, operation or use of a building or premises subject to the inspection of the City of New Berlin Fire Department, the Fire Chief may require the owner or the person in possession or control of the building or premises to provide without charge to the City of New Berlin Fire Department a technical opinion and report. The opinion and report shall be prepared by a qualified engineer, specialist, laboratory or firesafety organization acceptable to the Fire Chief and the owner and shall analyze the firesafety properties of the design,

operation or use of the building or premises and the facilities and appurtenances situated thereon and prescribe the necessary recommended changes.

124-11. Automatic sprinkler protection.

A. Installation required. Approved automatic fire sprinkler equipment shall be installed and maintained as follows:

- (2) Basements. All basements: required throughout.
- (5) Theaters and assembly halls: required throughout all buildings.
- (6) Hotels and motels: required throughout all buildings.
- (7) Hospitals, housing for the elderly and other institutional buildings: required throughout all buildings.
- (8) Nursing, convalescent, old age and institutional buildings: required throughout all buildings.
- (9) Schools, colleges, universities: required throughout all buildings.
- (10) Dormitories, fraternity houses and sorority houses: required throughout all buildings.
- (11) Day-care centers serving nine or more children. All new construction and existing buildings being converted to day-care centers, regardless of gross square footage, shall be completely sprinklered in accordance with NFPA 13 or other applicable NFPA Code.
- (12) Community-based residential facilities (CBRFs). All new construction and existing buildings being converted to CBRFs, regardless of gross square footage, shall be completely sprinklered in accordance with NFPA 13 or other applicable NFPA Code.
- (13) Parking ramps: required throughout all closed and open parking ramps or structures which are used for the parking of passenger vehicles. Facilities for repairing or fueling vehicles within the structure are prohibited.
- (14) High-hazard occupancies: required throughout every building which, by reason of its construction or highly combustible occupancy, involves a severe life hazard to its occupants or constitutes a fire menace. The following list, as examples of high-hazard occupancies, is not to be considered all-inclusive:
 - (a) Aluminum powder factories.
 - (b) Cellulose nitrate plastic factories.
 - (c) Cereal mills.
 - (d) Distilleries.
 - (e) Floor and feed mills.
 - (f) Grain elevators.
 - (g) Aircraft hangars.
 - (h) Chemical works.
 - (i) Explosive or pyrotechnic manufacturing.

- (j) Linseed oil mills.
 - (k) Linoleum and oil cloth manufacturing.
 - (l) Oil refineries and gasoline bulk tanks.
 - (m) Pyroxylin plastic manufacturing or processing.
 - (n) Shade cloth manufacturing.
 - (o) Solvent extracting.
 - (p) Varnish or paint manufacturing.
 - (q) Paint stripping establishments.
 - (r) Any occupancy involving processing, mixing, storage or dispensing of volatile liquids.
 - (s) Waste paper plants.
 - (t) Vehicle storage.
 - (u) Smokehouses.
 - (v) Storage of explosive gases under pressure (15 pounds per square inch and over 5,400 cubic feet), such as acetylene, hydrogen and natural gases.
 - (w) Storage of materials with a flash point under 200° F., such as, but not limited to, celluloid products, kerosene, etc.
 - (x) Woodworking and other such establishments with combustible dusts.
 - (y) Body shops.
 - (z) Lube shops.
 - (aa) Repair garages.
 - (bb) Buildings for the storage of recreational vehicles, boats, snowmobiles, etc.
- (15) Other properties requiring protection.
- (a) Bowling alleys: required throughout all buildings.
 - (b) Restaurants: required throughout all restaurants.
 - (c) Buildings two stories or higher: required throughout all buildings.
 - (d) Buildings involving a severe life hazard: required throughout every building which, by reason of its construction or highly combustible occupancy, involves a severe life hazard to its occupants or adjacent property or in the judgment of the Fire Prevention and Inspection Bureau constitutes a fire menace.

C. How installed.

- (1) Approved automatic fire sprinkler equipment shall be installed in accordance with the current edition of NFPA 13, "Standard for the Installation of Sprinkler Systems," or other applicable standards of the NFPA and the City of New Berlin Fire Department.
- (2) Compressors for dry pipe systems are required to be wired directly to building power.

- (3) All compressors for dry pipe systems will have low limit air switches and alarms.
- (4) In areas where there is no City water:
 - (a) The sprinkler system is required to be connected to domestic water at the time of installation.
 - (b) When City water becomes available, the owner will have 90 days to hook up to the City main.
 - (c) The sprinkler system supply line is to be the same size as the lateral from the well in accordance with Chapter 193, Plumbing Standards, of this Code.

F. Application to existing buildings.

- (1) Where the Fire Prevention and Inspection Bureau finds that existing buildings are used in whole or in part in such a way as to constitute a severe fire hazard to their occupants or to adjoining property, the Fire Prevention and Inspection Bureau may require compliance with the provisions of this chapter as they relate to new construction.
- (2) All existing public buildings or places of employment and all additions shall conform to this section as follows:
 - (a) If more than 50% of the area or square footage of a building is remodeled, added to, or both, the entire building shall comply with the requirements of this chapter. When determining what constitutes 50% remodeled or added, you will add all previous additions or areas remodeled together to arrive at the total area that has been renovated. If this percentage is equal to or greater than 50% of the gross area of the original building as determined as of the effective date of this chapter, the entire building will be required to be brought up to code.
 - (b) Any building with an existing sprinkler system, when making an addition, regardless of size or occupancy, will sprinkler the addition in accordance with NFPA 13 or other applicable NFPA Code.
 - (c) If the use or occupancy of a building is changed and the hazard, life safety or both become more severe, the entire building shall be brought into compliance with the sprinkler code.

G. Fire Department hose connections. Every automatic sprinkler system installed in new or existing buildings shall be equipped with at least one Fire Department hose connection at a location approved by the Fire Prevention and Inspection Bureau. Audible alarm bells are required on the inside and outside of all buildings that have sprinkler systems.

H. Exemptions and substitution.

- (1) Safe deposit or other vaults.
- (2) Electrical service rooms. Smoke detectors, rate-of-heat-rise detectors or fixed-temperature detectors shall be required to monitor this space.

124-12. Additional provisions.

B. Class III standpipes. Fire Department standpipes are required as follows:

- (1) The installation of a sprinkler system will not supersede the requirements for the installation of the Fire Department standpipes.
- (2) All newly constructed residential occupancies over one story in height that are required to be sprinklered and in which there are more than eight units per floor.
- (3) In all residential occupancies structurally altered to increase the floor area by 50% or more or are remodeled or altered by 50% or more and if more than one story in height. This subsection shall not apply to buildings that do not have common areas.
- (4) In all new buildings which, because of their occupancy, create special firefighting problems.
- (5) All standpipes will be installed per NFPA 14 Codes.

C. Automatic fire protection equipment. The intent of this subsection is to require automatic fire extinguishing systems in vent hoods and duct systems for all commercial-type kitchens to effectively extinguish fire at its source and reduce the property damage and loss caused by kitchen fires.

(1) Installation requirements.

(c) The system shall also be provided with an automatic fuel shutoff.

D. Automatic closing devices.

(1) Where required:

(a) Except on single- and two-family dwellings, there shall be an automatic closing device on all fire and smoke doors, except doors leading directly outside in all buildings, regardless of size.

(b) On all fire shutters and vents.

(c) Wired into a fire alarm system where a fire alarm system is required.

(2) How installed: per National Fire Protection Association standards and the National Electrical Code.

E. Fire alarms in public buildings. In any public occupancy where the exit travel is more than two stories above or below the level of exit discharge and/or subject to 50 or more occupants above or below the level of exit discharge or subject to 150 or more total occupants, a manual fire alarm system shall be provided.

Oak Creek

SEC. 15.14 CONSTRUCTION STANDARDS; STATE CODE ADOPTED.

(a) Portions of Wisconsin Commercial Building Code Adopted.

(1) Codes Adopted. The Wisconsin Building, Heating, Ventilation and Air Conditioning Code, ILHR 50 through 64 and Barrier-Free Design, ILHR 69, Wis. Code, both inclusive and all future amendments, revisions, or modifications thereto, are hereby made a part of this Code by reference with respect to those buildings to which said provisions apply.

SEC. 15.15 NEW METHODS AND MATERIALS.

(a) All materials, methods of construction and devices designed for use in buildings or structures covered by this Section and not specifically mentioned in or permitted by this Section shall not be so used until approved in writing by the Wisconsin Department of Commerce for use in buildings or structures covered by the Wisconsin State Building Code, except sanitary appliances, which shall be approved in accordance with the State Plumbing Code.

(b) Such materials, methods of construction and devices, when approved, must be installed or used in strict compliance with the manufacturer's specifications and any rules or conditions of use established by the Wisconsin Department of Commerce. The data, test and other evidence necessary to prove the merits of such material, method of construction or device shall be determined by the Wisconsin Department of Commerce.

(c) All materials, methods of construction and devices designed for use in buildings or structures not covered by the Wisconsin State Building Code shall be approved by the Building Commissioner when they are proved to be the equal of those specifically required by the Code.

SEC. 15.201 APPLICATION TO NEW AND EXISTING CONDITIONS.

The provisions of this Subchapter shall apply equally to new and existing conditions except that existing conditions, as of the effective date of this Subchapter not in strict compliance with the terms of this Subchapter, shall be permitted to continue where the exceptions do not constitute a hazard to life or adjoining property.

(a) State and National Codes Adopted All Orders, Rules and Regulations of the Department of Commerce, set forth in the Wisconsin Administrative Code Comm 61 through 65 and any future amendments thereto are hereby adopted by reference. The Wisconsin Enrolled Commercial Building Code, International Fire Code, National Electrical Code, and any future amendments thereto are hereby adopted by reference. The following NFPA regulations and any future amendments thereto are hereby adopted by reference:

(1) NFPA 13, 13R, and 13D Automatic Sprinkler Systems. 2002 edition

(2) NFPA 303 Fire Protection Standard for Marinas and Boatyards. 2000 edition

(3) NFPA 307 Standard for the Construction of Fire Protection of Marine Terminals, Piers, and Wharves. 2000 edition

(4) NFPA 850 Recommended Practice for Fire Protection for Electric Generating Plants. 2000 edition

(b) Conflicting Provisions In cases of conflict between local, state, and national code provisions, the most restrictive provisions shall govern.

SEC. 15.217 AUTOMATIC FIRE SPRINKLER REQUIREMENTS.

(b) Approved Sprinkler System Required. Every building hereinafter constructed or altered shall have an approved sprinkler system complying with the requirements of NFPA 13 and standpipe installed and maintained when occupied in whole or part for the following purposes:

NOTE: See definitions of area and total floor area for determining application of this Subsection.

(1) Principal Buildings. In all principal buildings, as follows:

c. *Warehouses With Rack Storage.*

1. Areas with storage of twelve (12) feet or less in height on racks shall be protected with automatic fire sprinklers in accordance with NFPA 13.

2. Areas with storage of greater than twelve (12) feet in height on racks shall be protected with automatic fire sprinklers in accordance with NFPA 13 standard for rack storage of materials.

(3) Repair Garages. Throughout repair garages as follows:

a. Fire resistive buildings over three thousand (3,000) square feet in area or exceeding one (1) story.

b. Non-fire resistive buildings over two thousand (2,000) square feet in area.

c. Basement and sub-basement garages and garages above or below other occupancies.

(5) Theaters and Assembly. Throughout all buildings.

(6) Hospitals. Throughout all buildings.

(7) Nursing, Convalescent, Old Age, and Other Institutional Buildings. Throughout all buildings.

(8) Schools, Colleges and Universities. Throughout all buildings.

(9) Dormitories, Fraternities and Sorority Houses. Throughout all buildings.

(10) Hotels and Motels. Throughout all buildings.

(11) Day Care Centers. Throughout all buildings.

(12) Community Based Residential Facilities (CBRF). Throughout all buildings.

(13) Other Buildings and Areas Requiring Sprinkler Protection.

a. *Spray Booths.* All spray booths using combustible or flammable liquids at any time shall be provided with a sprinkler system according to NFPA.

b. *Kitchen Exhaust Hoods.* All kitchen exhaust hoods (except in domestic science educational facilities from grades Kindergarten through 12, and single unit apartments in hotels, motels apartment buildings) shall be provided with a sprinkler system or have an approved type of automatic extinguishing system installed.

(14) Hazardous Properties. Throughout every building, which by reason of its construction or highly combustible occupancy involves a severe life hazard to its occupants, or in the judgment of the Fire Chief, constitutes a fire menace. A sample of occupancies considered highly combustible are as follows:

a. Aircraft hangars.

b. Chemical works.

c. Explosives and pyrotechnics manufacturing.

d. Linseed oil mills.

e. Linoleum and oil cloth manufacturing.

- f. Oil refineries.
- g. Paint shops.
- h. Pyroxlin plastic manufacturing and processing.
- i. Shade cloth manufacturing.
- j. Solvent extracting.
- k. Varnish works.
- l. Any other occupancies involving processing, mixing, storage and dispensing of volatile liquids.
- m. All sub-basements regardless of floor area.

(c) Existing Buildings.

(1) Where the Fire Departments or a duly authorized representative thereof finds that existing buildings which are used in whole or in part for the purposes set forth in Subsection (b) of this Section, he shall order compliance with the provisions of this Section. Installation of the automatic sprinkler system shall be started within one (1) year from the service of such order and completed within ninety (90) days after construction is started.

(2) When the occupancy or use of a building with an existing automatic fire sprinkler system changes to a higher hazard level as defined in NFPA 13, the automatic fire sprinkler system shall be altered so as to comply with the NFPA 13 requirements for the new level of hazard. Revision of the automatic sprinkler system shall begin within ninety (90) days from the date of such change in occupancy or use and be completed within ninety (90) days after construction has started.

(d) How Installed. Approved fire sprinkler equipment shall be designed, installed and tested in accordance with NFPA13, "Standard for the Installation of Sprinkler Systems," and other applicable standards of the National Fire Protection Association which are acceptable to the Fire Chief. All automatic fire sprinkler systems hydraulic designs are to be based on 90 percent of the available water supply (10% safety margin shall be maintained). All sprinkler systems designs shall be based on the most current approved water flow test. All water flow tests shall be witnessed by a Fire Department or Oak Creek Water Utility representative.

(e) Exemption and Substitution of Other Fire Protection Equipment. Nothing contained herein shall be construed as to require the installation of sprinklers in safe deposits or other vaults or in rooms of buildings devoted to the manufacture or storage of aluminum powder, calcium carbide, calcium phosphide, metallic sodium and potassium quick lime, magnesium powder, sodium peroxide or like materials where the application of water may cause or increase combustion, nor in any other location where the installation of sprinklers may increase the hazard nor shall it be construed in any way to prohibit the substitution of other automatic protective equipment when approved by the Bureau of Fire Prevention.

(g) Additions or Remodeled Buildings and Change of Use. All existing buildings subject to this Section and all additions to these buildings shall conform to this Subsection, as follows:

(1) If fifty percent (50%) or more of the total floor area of a building is remodeled and/or added, the entire building shall comply with the requirements of this Section.

(4) From the effective date of this Code forward, all percentages of additions or remodelings shall be additive as applied to Subsections (g) (1), (2) and (3) above.

Osceola

§ 92-2. Fire Prevention Code.

- A. Wisconsin Administrative Code adopted. Chapter 6.s, Wisconsin Administrative Code, is adopted by reference and made a part of this chapter as if set out in full.
- B. Violations. A violation of any provisions thereof shall be a violation of this chapter.
- C. Fire limits. The fire limits of the Village are established as follows: the Village plus townships, or any portion thereof, are served by contract

§ 92-3. Smoke detectors.

- B. Approval. A smoke detector required under this section shall be approved by Underwriters' Laboratories, Inc.
- C. Installation and maintenance. A smoke detector required under this section shall be installed according to the directions and specifications of the manufacturer and maintained in good working order.
- D. Requirement. The owner of a residential building shall install and maintain a smoke detector in each sleeping area of each unit, in the basement and at the head of the stairway on each floor level of the building.

§ 92-5. Commercial Building Code.

C. Adoption of codes. The following Wisconsin Administrative Codes, their referenced codes and standards and subsequent revisions are adopted for municipal enforcement by the Building Inspector:

Chapter	Subject
COMM/ILHR 61 to 6s	Wisconsin Uniform Building Code
COMM/ILHR 75 to 79	Existing Buildings Code
COMM/ILHR 70	Historic Building Code

Oshkosh

SECTION 13-2 FIRE PREVENTION ADOPTION OF FIRE PREVENTION CODES

(A) The following rules and regulations together with any future additions, deletions or supplements thereto, are herewith incorporated as part of this Chapter and shall be enforced with the same force and effect as though set forth in full herein. Providing, however, that where such rules and regulations are less stringent than other provisions found in this Code, the provisions of this Code shall apply.

(1)

(a) International Fire Code (IFC) 2009 Chapter 1, but excluding Section 108 and 109.3 and City of Oshkosh including only those Sections of 105.6 and 105.7 as enumerated below:

Required Operational Permits

105.6.2 Amusement buildings

105.6.4 Carnivals and fairs

105.6.13 Exhibits and trade shows

105.6.15 Fire hydrants and valves

105.6.30 Open burning

105.6.35 Private fire hydrants

105.6.36 Pyrotechnic special effects material

105.6.43 Temporary membrane structures, tents and canopies

Required Construction Permits

105.7.1 Automatic fire-extinguishing systems

105.7.5 Fire alarm and detection systems and related equipment

105.7.6 Fire pumps and related equipment

105.7.11 Private fire hydrants

105.7.13 Standpipe systems

105.7.14 Temporary membrane structures, tents and canopies

Pewaukee

ARTICLE VI. - SPRINKLER SYSTEMS

Sec. 34.122. - Where required.

(a) *Specific locations.* Automatic sprinkler systems shall be installed and maintained in operable condition in the following new buildings, occupancies and locations:

(3) *Within the following residential occupancies:*

c. Any building that has residential units mixed with other types of occupancies, such as mercantile space on the first floor and residential space on the second floor, shall be sprinklered throughout the entire building.

(4) *New theaters and buildings of public assembly with over 100-person occupancy.* Automatic sprinklers shall be installed throughout such buildings regardless of size or type of construction.

(5) *New health care facilities, including hospitals, nursing homes, convalescent and group care centers.* Automatic sprinklers shall be installed throughout such buildings regardless of size or type of construction.

(6) *New detention and correctional facilities.* Automatic sprinklers shall be installed throughout the buildings regardless of size or type of construction.

(8) *High-hazard occupancy.* Automatic sprinkler systems shall be installed throughout any new building that, by reason of its construction or combustible occupancy, is deemed a severe hazard to life or property by the fire chief. This includes but shall not be limited to:

- a. Aircraft/helicopter hangars, aircraft/helicopter servicing.
- b. Dry cleaning establishments using or storing volatile or flammable liquids.
- c. Enameling or Japanning operations.
- d. Mills.
- e. Paint and varnish—manufacturing, storage, handling, spraying or other related operations.
- f. Pyroxylin products.
- g. Smokehouses.
- h. Storage of combustible and flammable gases such as acetylene, hydrogen, liquid propane, etc., in excess of 1,000 cubic feet.
- i. Chemical works.
- j. Warehouses with materials piled 15 feet or more in height.
- k. Explosive and pyrotechnic manufacturing and storage.
- l. Basements over 2,500 square feet in size, and containing combustible materials or storage (in buildings not meeting the requirements of Wis. Admin. Code ch. ILHR/Comm. 66).

(b) *Exceptions.* Automatic fire sprinkler systems are not required in the following:

- (1) Rooms or buildings used for the manufacture or storage of aluminum powder, calcium carbide, calcium phosphate, metallic sodium or potassium, quicklime, magnesium powder, sodium peroxide or like materials where the application of water may cause or increase combustion;
- (2) In any building that is used to melt and pour metal or glass into a mold or case (foundry); but only that portion of the building where molten product is present is exempt; or
- (3) In any building where the fire chief determines that the use of water as a fire extinguishing agent would increase the hazard. However, an automatic fire suppression system using an extinguishing agent other than water, requires that an automatic smoke detection system be installed.

Sec. 34.123. - Application to existing buildings.

All existing public buildings or places of employment, and all building additions shall conform to the provisions of this article applicable to new buildings if:

- (1) More than 50 percent of the building is remodeled or more than 50 percent is added to the building; if more than 50 percent of the area or square footage of a building is remodeled and/or added to, the entire building shall comply with the requirements of this section.
 - a. When determining what constitutes 50 percent remodeled or added, add all previous additions or areas remodeled together to arrive at the total area that has been renovated. If this percentage is equal to or greater than 50 percent of the gross area of the original building

as determined by the effective date of the ordinance from which this section is derived, the entire building is required to be brought up to code.

(2) Any building with an existing sprinkler system when making an addition regardless of the size or occupancy, will sprinker the addition in accordance with NFPA13 or other applicable IFC or NFPA codes.

(3) If the use or occupancy of a building is changed and the hazard and/or danger to life becomes more severe, the entire building shall be brought into compliance with this section.

Sec. 34.125. - Installation.

(a) Approved automatic fire sprinkler equipment shall be installed in accordance with the standards of the current edition of IFC and the NFPA relating to the installation of sprinkler systems and other applicable standards of ILHR/COMM and the ordinances of the city and village.

(b) Compressors for dry pipe systems are required to be wired directly into the building's electrical power system.

(c) All compressors for dry pipe systems will have low-limit air switches and alarms.

(d) The hydrant water flow test data shall be dated no greater than six months prior to the submission of sprinkler plans. The data shall be obtained during peak flow conditions and conducted with accurate gauges.

(e) The sprinkler system design shall be based on 95 percent of the available water supply.

(f) Every system shall have an alarm system that is audible throughout the building. All alarm systems shall be interconnected. One water flow alarm shall be provided on the outside of the building by the F.D.C.

4.15 INSTALLATION OF SPRINKLER SYSTEM.

(2) NEW BUILDINGS. Automatic fire sprinkler systems shall be installed and maintained in operable condition in the following new buildings:

(c) Within new theaters and buildings of public assembly with over 100 person capacity; health care facilities including hospitals, nursing homes, convalescent and group care centers; detention and correctional facilities; public or private day care facilities licensed to accommodate twenty (20) or more children.

(e) High hazard Construction or Occupancy: Within any new building or new occupancy which by reason of its construction, combustible operations or both is deemed a severe hazard to life or property by the Fire Chief or his assignee. This includes, but shall not be limited to the following operations:

1. Manufacturing, storage, handling, or spraying paint or varnish or other related operations;
2. Storage of combustible and flammable gases including, but not limited to acetylene, hydrogen, and liquid propane, in amounts exceeding 2,000 cubic feet;
3. Manufacturing and storing explosives and pyrotechnics;
4. Commercial building basements over 2,500 square feet, containing or storing combustible materials and not subject to the requirements of the Wisconsin Administrative Code.

(f) Exceptions: Automatic fire sprinkler systems are not required in the following when approved by the Fire Chief:

1. Rooms or buildings used for the manufacture or storage of aluminum powder, calcium carbide, calcium phosphate, metallic sodium or potassium, quick lime, magnesium powder, sodium peroxide or like materials where the application of water may cause or increase combustion;
2. The portion of a building or foundry used to melt and pour metal or glass into a mold or cast and portions of buildings used for heat treating operations;
3. In any building where the Fire Chief determines that the use of water as a fire extinguishing agent would increase the hazard. However, an automatic fire suppression system as defined in IBC Ch. 9 as adopted by the Wis. Adm. Code, COMM Ch. 61-65 using an extinguishing agent other than water, and/or an automatic smoke detection system shall be installed;
4. Church sanctuaries and church naves which are used exclusively for worship and ceremonies.

(3) APPLICATION TO EXISTING BUILDINGS.

(a) Automatic fire sprinkler systems shall be installed and maintained in operable condition in existing public buildings or places of employment, within additions to existing public buildings or places of employment, where:

1. An addition is made to an existing building which contains an automatic fire sprinkler system;

(b) The building owner or occupants shall not make changes in the occupancy, use or processes utilized within, or materials used or stored in the building without evaluation by the City of Pewaukee Fire Department of the fire protection systems and their capability to protect the new occupancy's use of materials. The evaluation shall consider factors that include but are not limited to occupancy changes, process or material changes, or building renovations such as relocating walls, adding mezzanines and ceilings below sprinklers, the removal of heating systems and spaces with piping subject to freezing.

(9) FIRE DEPARTMENT HOSE CONNECTIONS. Every automatic sprinkler system installed in new or existing buildings shall be equipped with at least one Fire Department hose connection at a location approved by the Fire Prevention Bureau and meeting Wis. Adm. Code standards

Pleasant Prairie

§ 180-16. Automatic fire sprinkler, fire suppression and fire alarm systems and fire hydrants.

E. State regulations. All Building Code requirements, rules and laws of the State of Wisconsin shall apply to all buildings located within the Village of Pleasant Prairie, Wisconsin. The requirements of this section shall not lessen any Building Code requirements, rules or laws of the State of Wisconsin. Should any conflict arise between this section and the codes, rules or laws of the state, the more stringent regulation shall govern.

G. Where installed.

(2) Approved automatic fire sprinkler equipment shall be installed and maintained in all buildings, including the following: commercial, office, Industrial, institutional, and government buildings and public buildings.

(b) Sprinkler water flow, other suppression devices, smoke and heat detection equipment and manual pull stations shall be monitored by a central station 24 hours a day throughout the building and the alarm when activated sent to a central station.

(3) Approved automatic fire sprinkler equipment shall be installed and maintained in the following accessory buildings and special principal buildings and building areas, except in mini storage buildings when in compliance with this chapter, and one- and two-family dwellings:

(a) Garages and open parking structures as follows: garages and open parking structures within, attached to, above or below other occupancies and garages and open parking structures used as passenger terminals. Sprinkler water flow, other suppression devices, smoke and heat detection equipment and manual pull stations shall be monitored by a central station 24 hours a day throughout the building and the alarm when activated sent to a central station.

(e) Nursing, convalescent, old-age, and adult living centers, community-based residential facilities (CBRF), and other similar institutional buildings: throughout all nursing, convalescent, old-age, and adult living centers, CBRF and other institutional buildings regardless of size. Sprinkler water flow, other suppression devices, smoke and heat detection equipment and manual pull stations shall be monitored by a central station 24 hours a day throughout the building and the alarm when activated sent to a central station.

(g) Hotels, motels, dormitories, fraternities, and sorority houses: throughout all buildings, regardless of size. This applies to all new construction or renovations. Sprinkler water flow, other suppression devices, smoke and heat detection equipment and manual pull stations shall be monitored by a central station 24 hours a day throughout the building and the alarm when activated sent to a central station.

(h) Adult and child day-care center: All new construction, regardless of size, shall have sprinklers. Sprinkler water flow, other suppression devices, smoke and heat detection equipment and manual pull stations shall be monitored by a central station 24 hours a day throughout the building and the alarm when activated sent to a central station.

(i) Community-based residential facilities (CBRF): All new construction regardless of size shall have sprinklers. Sprinkler water flow, other suppression devices, smoke and heat detection equipment and manual pull stations shall be monitored by a central station 24 hours a day throughout the building and the alarm when activated sent to a central station.

(l) Mini storage buildings are exempt from the requirements of fire sprinkler protection when the following criteria are met:

[1] No portion of the mini storage building shall exceed 2,000 square feet in size with the separation being a two-hour-rated fire separation. The location of the fire separation shall be identified on each exterior wall using a Fire & Rescue Department approved method.

[2] Each mini storage unit shall have a heat detector that, when activated, illuminates an indicator light outside of the unit; a strobe light on the building forward end; and transmits a fire alarm signal to a central station.

[3] The owner shall include with the leasing documents that the storage of vehicles, combustible or flammable liquids, ammunitions and explosives is prohibited.

H. How installed.

(1) Incorporation of standards by reference. The most current printed editions of all NFPA documents are hereby incorporated by reference into this section.

(2) Material and test certificates. All fire-protection systems installed in the Village shall be tested in accordance with the requirements of the Wisconsin state code and NFPA codes and standards. In the event that a conflict between these documents occurs, the fire-protection contractor shall comply with the most stringent requirements. Two copies of each material and test certificate shall be provided to the Department before an occupancy permit will be granted.

(3) When using nonpotable water and/or a nonfreeze solution. Whenever nonpotable water is used to supply a fire sprinkler system and for when a fire sprinkler system uses any type of nonfreeze solution, a backflow prevention device as required by the State of Wisconsin and the Village of Pleasant Prairie Water Utility shall be required as part of those systems.

(4) Fire pump test header. Fire pump test headers shall be placed on the exterior of the fire pump room.

(5) Safety factor. The safety factor for a hydraulically calculated sprinkler system shall be a minimum of 10% or five psi, whichever is greater.

I. Standpipes and hose connections.

(1) Wet automatic standpipes shall be provided in all buildings three stories or more in height. Standpipes shall be sized and distributed as described In Subsection G(2).

(2) When the Fire & Rescue Department or NFPA requires the installation of small hose and small hose valve connections, this Department will require the installation of two-and-one-half-inch hose valves in lieu of the former. The two-and-one-half-inch hose valves shall be supplied from a separate piping system or from adjacent sprinkler systems. The two-and-one-half-inch NST valve shall be capable of delivering 250 gpm at 75 psi measured at the hose valve. The standpipes shall be wet and placed first adjacent to the exterior exit doors and then move inward to provide the required coverage. Hose valves shall be no further than 150 feet apart, per floor.

J. Fire Department connection. The Fire Department connection (FDC) for both the sprinkler system and standpipe systems shall be located remote from the building, curbside to a street or driveway. The minimum distance from the building shall be equal to the height of the building. FDCs may be placed at a greater distance from the building if the building is of extra hazard occupancy. The location of the FDC shall be approved by the Fire Department. The FDC shall have an automatic drip for drainage of the waterline enclosed within an inspection pit and accessed through a manhole, when the automatic drip cannot be placed within the structure.

M. Strobe light

(1) A red strobe light shall be placed in the vertical position above the audible water flow alarm. The light shall be activated by a sprinkler water flow. Additional strobe lights will be required on the exterior of buildings that have multiple sprinkler (risers in multiple locations) systems.

(2) Strobe specifications. The following strobe lights are acceptable for use: Federal, Model 131 ST/DST, and Whelen, Model 1550. Alternate manufacturers must be approved by the Department prior to installation.

O. Non-hydrant areas. For any building or areas of buildings which have been described herein and are built in a non-hydrant area of the Village (no public water mains), said building shall include an approved sprinkler system. Any approved sprinkler system must be connected to a sufficient water supply and sufficient pressure prior to occupancy. At such time municipal water becomes available to the site, connection to the municipal water system must be made within six months.

R. Additions, remodeled buildings, and change of use. All existing public buildings or places of employment and all additions shall conform to this section, as follows:

(1) More than 50% remodeled or added: if more than 50% of the gross area of a building is remodeled and/or added, the entire building shall be provided with the requirements in this section, provided that the Village determines the existing water supply is adequate.

(4) If the percentage remodeled or added is done from this date forward, all percentages are added together every time to get the total percentages remodeled.

(5) Change of use. If the use of an existing building is changed to a new use or the building undergoes physical remodeling, the entire building shall comply with this chapter.

S. Exemptions. Rooms or buildings devoted to the manufacture or storage of aluminum powder, calcium carbide, calcium phosphate, metallic sodium or potassium, quicklime, magnesium powder, sodium peroxide or like materials where the application of water may cause or increase combustion are exempt from the use of automatic water sprinkling systems but are required to install other forms of fire-protection systems approved by the Fire Chief.

T. Early warning detection.

(1) Smoke and heat detection systems shall be installed throughout the following buildings. These systems shall be monitored 24 hours per day by a remote central station service. When activated, the systems shall send an alarm signal to the central station.

- (a) Theaters and assembly buildings.
- (b) Hospitals.
- (c) Nursing homes.
- (d) Convalescent homes.
- (e) Homes for the aged.
- (f) Adult living centers.
- (g) Adult day-care facilities.
- (h) Community-based residential facilities.
- (i) Schools and other places of instruction.

- (j) Hotels.
- (k) Motels.
- (l) Dormitories.
- (m) Fraternities.
- (n) Sororities.
- (o) Child day-care facilities.
- (p) Multifamily buildings.

(2) Location. Approved fire detection devices shall be located per NFPA 70 and 72 and any other applicable state or NFPA codes.

(3) Installation. Approved fire detection devices shall be installed per NFPA 70 and 72 and any other applicable state or NFPA codes.

U. Automatic closing devices.

(1) Where installed:

- (a) Except on single- and two-family dwellings, there shall be an automatic closing device on all fire and smoke doors, except doors leading directly outside in all buildings, regardless of size.
- (b) On all fire shutters and vents.
- (c) Wired into the fire alarm system when a fire alarm system is required.

(2) How installed: per National Fire Protection Association Standard 80, Standard for Fire Doors and Other Opening Protectives.

(3) How maintained and inspected: per National Fire Protection Association Standard 80, Standard for Fire Doors and Other Opening Protectives.

V. Fire alarm systems.

(1) All fire suppression and detection systems shall be monitored by an approved central station.

(2) The signal for a fire alarm shall be sent to an approved central station. The signal for tamper and/or supervision shall be sent to the central station only.

(3) A minimum of one fire alarm control panel (FACP) shall be placed in the fire sprinkler riser/fire pump room or a location approved by the Fire & Rescue Department.

(4) The remote annunciator(s) alarm/indicator panel(s) shall be located in a location approved by the Fire & Rescue Department. All functions for alarm silence, reset and area identification shall be performed at this panel.

(5) The fire alarm system and the annunciator panel shall be addressable.

(6) The addressable system shall include fire detection and suppression systems, pull stations, tamper supervision, and audio/visual devices.

(7) In places of public occupancy, pull stations shall be required in new construction and during remodel projects.

(10) The Central Station shall immediately retransmit the fire alarm to the Pleasant Prairie Dispatch Center, which shall be the first notification made.

X. Cooking hoods: shall be connected to the required fire alarm system.

Y. Exit lights and emergency lights.

(1) Exit and emergency lights are required in all places of public occupancy.

(2) Exit and emergency lights shall have battery backup unless connected to an emergency generator.

(3) Combination exit and emergency lights are acceptable and recommended.

(4) Emergency lighting shall be installed in the sprinkler riser or fire pump room.

(5) Emergency lighting shall be installed in any electrical equipment rooms.

Plover

§ 286-5. Commercial/Industrial Buildings.

A. The Fire Chief shall utilize the National Fire Protection Association (NFPA) 1141 standard to assist in establishing the minimum water supply necessary for structural fire-fighting purposes in those areas where it has been determined that there is no water or inadequate water for firefighting.

B. Fire Alarm Installation. In each new Commercial multi-tenant building, the building owner shall provide each individual tenant space smoke (fire) detection notification to an approved location. The system shall be installed per NFPA 72. In addition, notification shall be given to all tenant space within the multi-tenant building upon activation. The system shall include smoke detector(s), horn strobes and manual pull station at each entrance. The system shall be approved by the Fire Chief and/or their designee prior to installation.

Port Washington

5.13.250 Sprinkler Systems Required.

C. Where Required. Every building hereinafter constructed or structurally altered shall have an approved automatic sprinkler system installed and maintained when occupied in whole or in part for the following purpose:

6. Theaters and Assembly halls

7. Hospitals and Other Institutional Buildings. Throughout every building.

8. Schools. Throughout every building.

D. Application to Existing Buildings. Where the Fire Department finds that by reason of construction or highly combustible occupancy, existing buildings constitute a severe fire hazard to its occupants or to adjoining property, the provisions of this section will apply.

I. Exemption and Substitution of Other Fire Protection Equipment. Nothing contained herein shall be construed as to require the installation of sprinklers in safe deposit or other vaults or in rooms or buildings devoted to the manufacture or storage of aluminum powder, calcium carbide phosphide, metallic and potassium, quick lime, magnesium powder, sodium peroxide or like materials where the application of water may cause or increase combustion, nor in any other location where the installation of sprinklers may increase the hazard nor shall it be construed in any way to prohibit the substitution of other automatic protective equipment when approved by the Fire Department of the Port Washington.

Racine

Sec. 50-48. - Order to install appliances.

The fire chief or officers of the bureau of fire prevention shall survey inspectable buildings and order required fire appliances to be installed.

Sec. 50-393. - Where required; compliance.

(a) All hood and duct systems shall be equipped with approved automatic fire extinguishing systems designed for both manual and automatic operation.

(b) All hood and duct systems shall comply with the requirements of this division and NFPA 96.

Sec. 50-408. - Where required.

New buildings or facilities shall have an approved automatic sprinkler system, standpipe system, and suitable access to supplementary water supply installed and maintained as required by Wisconsin Administrative Code, Comm 1-70, or at any time that the bureau of fire prevention determines that, based on the standards of the NFPA, a building or facility constitutes a fire hazard.

Sec. 50-409. - Application to existing buildings or facilities; appeals.

(a) Where the bureau of fire prevention finds that an existing building or facility constitutes a fire hazard to occupants of the building or facility or to adjoining property as a result of size, occupancy or change of occupancy, compliance with the provisions of this division may be required.

Rochester

ARTICLE 8. REQUIRED LAND IMPROVEMENTS.

30-87. SEWERS AND SEWERAGE DISPOSALS; WATER FOR FIRE PROTECTION.

B. Water Supply for Fire Protection.

1. In all commercial, industrial and recreational developments, and in all subdivisions in which five lots or more are created, the Village Plan Commission and Village Board shall consult with the contracted fire company and determine whether there is an adequate water supply for fire protection in the vicinity, and may require the Developer or Owner to install, prior to the issuance of any building permit for structures in the development or subdivision, a dry hydrant in an accessible pond, or an accessible underground cistern or holding tank, the plans for which shall be reviewed by the contracted fire company and the Village Engineer and approved by the Wisconsin Department of Natural Resources, to be used for fire protection. If required by the Village, the

pond, cistern or holding tank shall contain at least 20,000 gallons of water or a greater amount determined necessary by the contracted fire company and Village Engineer.

Shorewood

Chapter 290. FIRE PREVENTION

§ 290-1. State and national codes adopted.

A. All orders, rules and regulations of the Department of Commerce as are set forth in the Wisconsin Administrative Code and from time to time as amended are hereby adopted. The most current legislatively enacted versions will be enforced. This includes but is not limited to the Commercial Building Code, the Fire Prevention Code, the Electrical Code, and all Administrative Codes not listed. The Fire Prevention Code (NFPA 1), the Life Safety Code (NFPA 101) and all the referenced standards are incorporated herein by reference and adopted as part of this Fire Code. The most current available printed version of all NFPA codes and standards will be enforced. The International Building Code and all associated documents are adopted by reference in their most current printed version.

§ 290-2. Conflicting provisions.

In cases of conflict between local, state and national code provisions, the most restrictive provisions shall govern.

§ 290-10. Automatic-sprinkler systems.

D. Where required. An approved automatic fire sprinkler system shall be installed and maintained per the requirements of the Life Safety Code, NFPA 101. Where conflicts arise between this section and any other code section, the most restrictive requirements shall apply. Nothing in this section shall apply to one- and two-family dwellings.

(1) Special structures and high-rise buildings.

(a) Open structures (occasional occupants): provide automatic, manual or other protection or other protection that is appropriate for the hazard.

(b) Towers (occasional occupants): provide automatic, manual or other protection or other protection that is appropriate for the hazard.

(c) Water-surrounded structures (occasional occupants): provide automatic, manual or other protection or other protection that is appropriate for the hazard.

(d) Piers: protection dependent on use of pier.

(g) High-rise buildings: protected throughout by an approved automatic sprinkler system.

(h) Permanent membrane structures: portable fire extinguishers.

(i) Temporary membrane structures: portable fire extinguishers.

(5) Health care.

(a) Buildings containing health care occupancies: throughout.

(7) Lodging or rooming house: throughout.

(8) Hotels and dormitories: throughout.

(10) Residential board and care occupancies: throughout.

(12) Business occupancies: check occupancy chapter.

(13) Industrial occupancies.

(c) High hazard: throughout.

(15) Hazardous properties or special concerns: throughout every building which by reason of its construction or the highly combustible nature of its occupancy involves a severe hazard to the life of its occupants or, in the judgment of the authority having jurisdiction, constitutes a fire hazard which by its *very* nature may more directly affect adjoining properties.

E. How installed. All required fire-extinguishing and fire alarm systems shall be installed in accordance with current editions of the National Fire Protection Association, hereinafter referred to as "NFPA;" Fire Protection Code or Codes or other standards which substantially meet or exceed NFPA standards as approved by the Fire Chief.

§ 290-11. Fire extinguisher systems.

B. Where required.

(1) A Hood and duct system shall be Installed In any restaurant, and over all other equipment used for frying, cooking and similar preparation of food in all establishments, and shall be equipped with or have immediately available an approved automatic fire-extinguishing system designed for manual and automatic operation, or with a system approved by the Fire Department which will safeguard the premises, occupants and frequenters thereof.

(2) All establishments affected by the requirements of Subsection B(1) hereof shall comply with the requirements of this subsection. All new installations shall comply before the Building Inspector shall grant a certificate of occupancy.

C. Installation requirements.

(1) All equipment shall conform to the appropriate NFPA Standard. The equipment shall be either a package unit as listed in the Underwriters' Laboratories, Inc., fire protection equipment list for the extinguishment of fires in hoods, filters, and ducts used for ventilation of restaurant cooking equipment or a system individually designed ("engineered systems") to the applicable NFPA standard for the type of extinguishing equipment. A manual actuation control, which is accessible to kitchen personnel, shall be provided. The control shall be located near the hood not more than five feet above the floor, readily accessible and not obstructed by cabinets or any other objects, permanent or temporary, that would affect a person's ability to see the device. Instructions on operation of the manual control system shall be posted. A visual Indicating device shall be provided and so located that at any time it can readily be determined if the system's extinguishing agent has discharged. An automatic fuel shutoff device shall be provided on all gas-fired appliances.

(3) Cooking surfaces that are open or partly open shall be protected, including range tops, fat fryers, open broilers, griddles, etc. Fully enclosed devices, such as ovens, enclosed broilers, coffee urns, etc., may require protection check listing. At least one nozzle shall be installed for each fat

fryer. Cylinders containing the extinguishing agent shall not be mounted in a concealed space. Cylinders shall be readily accessible for inspection and servicing.

(4) Protection of ducts shall be within the limitations of a single system; multiple systems cannot be used. Ducts which exceed the limitation of a single system must be protected by engineered systems or the ducts replaced with ducts which are within package system limitations. Where no hoods are installed and cooking protection is provided, detector links with heat deflectors shall be located in the same relative position as if a hood were provided. One link shall be provided for each cooking appliance.

§ 290-12. Preconstruction and postconstruction requirements.

D. Firestopping.

(1) Concealed spaces. In the construction of new buildings or structures involving structural or substantial alterations amounting to more than 50% of the assessed valuation of the building or structure, any concealed space in which materials having a flame-spread rating greater than Class A are exposed shall be effectively fire-stopped as hereinafter provided with materials approved by the Fire Department

(a) Every interior and exterior wall and partition shall be fire-stopped at each floor level, at the top story ceiling level and at the level of support for roofs.

(b) Every unoccupied attic space shall be subdivided by fire stops into areas not to exceed 3,000 square feet.

(c) Any concealed space between the ceiling and the floor or the roof above shall be fire-stopped for the full length of the space along the line of support for the floor or roof structural members and, if necessary, to be determined by the Fire Department, at other locations, to form areas not to exceed 1,000 square feet for any space between the ceiling and the floor and 3,000 square feet for any space between the ceiling and the roof.

Chapter 225. BUILDING CONSTRUCTION

§ 225-6. General requirements.

A. Connection to water system. All buildings or parts thereof to be used for residential or commercial purposes must be fully equipped with all necessary plumbing and piping for water and sewer service, and the same shall be connected adequately with the Village water and sewer systems as required by applicable Village code and state regulations.

Somers

CHAPTER 16 AUTOMATIC SPRINKLER AND FIRE PREVENTION SYSTEMS

16.03 APPLICATION.

(A) New Buildings and Additions. The provisions of this chapter shall apply to all new commercial buildings, and to all existing commercial buildings receiving additions which are subject to the minimum building size requirements under §16.19. These provisions shall not apply to those buildings indicated under §16.04.

(B) Alterations to Buildings. The provisions of this chapter shall apply to all existing buildings receiving remodeling and/or alterations which are subject to the minimum building size requirements under §16.19. These provisions shall not apply to those buildings indicated under §16.04.

(C) Change of Use.

(1) Reported. If the use of an existing building is changed in accordance with the definition of §16.30, and the current requirements for the new use are more stringent than those for the previous use, the building shall be made to comply with the current requirements for the new use.

(2) Unreported. If, upon inspection of an existing building, it is found that its use has been changed in accordance with the definition of §16.30, and the current requirements for the new use are more stringent than those for the previous use. The building shall be made to comply with the current requirements for the new use.

16.05 STATE REGULATIONS.

All building code requirements, rules and laws of the State of Wisconsin shall apply to all buildings located within the Town of Somers, Wisconsin. The requirements of this chapter shall not lessen any building code requirements, rules or laws of the State of Wisconsin. Should any conflict arise between this chapter and the codes, rules or laws, the more stringent regulation shall govern.

16.18 INCORPORATION OF STANDARDS BY REFERENCE.

The most current edition of all NFPA documents are hereby incorporated by reference into this chapter.

16.19 GENERAL DESIGN REQUIREMENTS.

(A) Approved automatic fire sprinkler systems shall be installed and maintained in all of the following classifications of buildings which are located within the Town of Somers, Wisconsin, subject to the exemptions contained in §16.03 and §16.04 of these ordinances, in accordance with the following criteria:

(B) Occupancy Classification. The occupancy of a building or structure, or portion of a building or structure, shall be classified in accordance with (1) through (19). Occupancy classification shall be subject to the ruling of the Somers Fire Department where there is a question of proper classification in any individual case.

(3) Day-Care Occupancy. An occupancy in which four (4) or more clients receive care, maintenance, and supervision, by other than their relatives or legal guardians, for less than twenty-four (24) hours per day.

(a) All areas of all buildings.

(11) Residential Board and Care Occupancy. A building or portion thereof that is used for lodging and boarding of four (4) or more residents, not related by blood or marriage to the owners or operators, for the purpose of providing personal care services.

(a) All areas of all buildings.

(13) Business Occupancy. An occupancy used for account and record keeping or the transaction of business other than mercantile.

(a) Fire resistive construction.

(i) One story. All areas of buildings exceeding ten thousand (10,000) square feet in total area.

(ii) Two story. All areas of buildings exceeding ten thousand (10,000) square feet in total area or having a single floor area exceeding five thousand (5,000) square feet.

(iii) More than two stories. All areas of all buildings.

(b) Non-fire resistive construction.

(i) One story: All areas of buildings exceeding five thousand (5,000) square feet in total area.

(ii) More than one story. All areas of all buildings.

(18) Attic Spaces In Non-single or two-family residential.

(b) Commercial, industrial governmental and institutional buildings.

(i) Buildings with a combustible roof shall have attic spaces subdivided into areas not exceeding three thousand (3,000) square feet by a one (1) hour fire rated partition.

(ii) All openings in the attic space partitions shall have a one (1) hour fire rated self-closing door.

(iii) All combustible attic spaces and all attics used for storage shall be completely protected by an approved automatic fire sprinkler system.

(iv) The requirements of §16.19(B)(20)(b)(i) and §16.19(B)(20)(b)(ii) shall not apply when the building, including all attic spaces, is completely protected by an approved automatic fire sprinkler system.

(19) Other Buildings. The Somers Fire Department shall be consulted for the requirements of all non-exempt buildings that are not included in the other categories listed under this subsection.

16.20 SMOKE/HEAT DETECTION.

Smoke and heat detection systems shall be installed throughout the following buildings. These systems shall be monitored twenty-four (24) hours per day by a remote central station service. When activated, the systems shall send an alarm signal to the central station service who shall then notify the Kenosha County Dispatch Center immediately.

(A) Theaters and Assembly Buildings.

(B) Hospitals.

(C) Nursing Homes.

(D) Convalescent Homes.

(E) Homes for the Aged.

(F) Adult Living Centers.

(G) Adult Day Care Facilities.

(H) Community-Based-Residential-Facilities.

(I) Schools and Other Places of Instruction.

(J) Hotels.

(K) Motels.

(L) Dormitories.

(M) Fraternities.

(N) Sororities.

(O) Child Day Care Facilities.

(P) Multi-Family Buildings.

16.21 SPRINKLER HEADS.

(A) Spacing. All building code requirements, rules and laws of the State of Wisconsin and the requirements of all applicable NFPA documents shall apply with the following exceptions:

(1) For all hazards requiring a design density less than 0.25 gpm/sq. ft. the maximum head spacing shall be one hundred thirty (130) square feet

(2) For all buildings which qualify for NFPA 13R designs, the spacing requirements of these documents shall be used except that:

(a) Maximum head spacing for all areas outside of the dwelling units, excluding attic spaces, shall be one hundred thirty (130) square feet.

16.23 FIRE DEPARTMENT CONNECTION.

(A) The distance between Fire Department Connections (FDC) for either sprinkler or standpipe systems and the pumper pad shall be no greater than forty (40) feet.

(B) The minimum distance of the pumper pad from the building shall be equal to the height of the building plus ten (10) feet.

(C) All FDC's shall be equipped with an automatic ball drip. Location and arrangement shall be approved by the Fire Department prior to installation.

16.26 STROBE LIGHT.

(A) A strobe light shall be placed above the audible water flow alarm. The light shall be activated by the flow from a single sprinkler head. Additional strobe lights shall be required on buildings that have multiple sprinkler systems (risers in multiple locations).

(B) Strobe specifications. The following model strobe lights are acceptable for use:

(1) Federal, Model 131 ST/DST.

(2) Whelan, Model 1550.

(3) Equal.

16.28 NON-HYDRANTS AREAS.

(A) Any building which is subject to the requirements of this chapter pertaining to automatic fire sprinkler systems or an automatic fire suppression system and which is located in a nonhydrant area of the Town of Somers (an area without public water mains), shall be provided with an approved source of water supply capable of providing a maximum pressure of fifty (50) psi to the building's automatic fire sprinkler system(s) and/or automatic fire suppression system(s).

(B) Should a public water main be installed at the site of an existing building which is protected by either an existing automatic fire sprinkler system or an existing automatic fire suppression system, the owner shall connect the existing system(s) to the public water main within six (6) months of the date that the public water main is installed at the building site.

16.31 OTHER REQUIREMENTS.

(F) Sprinkler systems shall be monitored twenty-four (24) hours a day by a Central Station Service.

(H) All Fire Department Connections shall be located within one hundred (100) feet of a fire hydrant.

(I) Strobe/horn alarms shall be mounted above the Fire Department Connection.

South Milwaukee

27-01 GENERAL PROVISIONS

(2) APPLICATIONS

(a) The provisions of this code shall apply to all public buildings and places of employment.

Exceptions: The following buildings and uses are not public buildings or places of employment and are not subject to the provisions of this code:

1. One and two-family dwellings
2. Buildings used exclusively for farming as described in Wi. ss.102 .04

Nothing contained in this section shall be construed as applying to the transportation of any article or thing shipped in conformity with the regulations prescribed by the Interstate Commerce Commission, or as applying to the military forces of the United States.

(3) ADDITIONS TO, CHANGE OF USE OR REMODELED BUILDINGS

(a) If fifty (50) percent or more of the total floor area of a building is remodeled and/or added, the entire building shall be brought into compliance with the requirements of this Code.

(d) All percentages of additions or remodeling shall be cumulative as applied to (a), (b), and (c) above.

(e) If the use of and/or contents of any existing building is changed and becomes more hazardous as determined by the *Authority Having Jurisdiction (AHJ)*, the building shall be brought into compliance with this code.

(f) Those portions, elements, systems or components of existing buildings and structures to be altered or modified on or after the effective date of the rules under this Code and where the alteration, modification or the addition affects a building element or component relating to subject matters regulated by this Code, shall be designed, constructed and maintained in accordance with the applicable rules of this Code as the rules exist on one of the following:

1. The date plans for the alteration or modification are conditionally approved by the AHJ.
2. The date the local building permit is issued.
3. The date the replacement is initiated, where 27-1 (3)(f)1. & 2. do not apply.

27-05 ADOPTION BY REFERENCE NFPA PUBLICATIONS

The latest NFP A publications published on or before the effective date of this Code are adopted by reference, enforced and incorporated into this Code as if fully set forth herein:

NFPA 1	<i>Uniform fire Code (applies only to the use, maintenance, operation and testing), 2009 edition</i>
NFPA 10	<i>Standard for Portable Fire Extinguishers, 2007 edition</i>
NFPA 11 edition	<i>Standard for Low-, Medium- and, High-Expansion Foam, 2005</i>
NFPA 12 edition	<i>Standard on Carbon Dioxide Extinguishing Systems, 2005</i>
NFPA 13	<i>Standard for the Installation of Sprinkler Systems, 2007 edition</i>
NFPA 13D	<i>Sprinkler Systems in One and Two-Family Dwellings and Manufactured Homes, 2007 edition</i>
NFPA 13R	<i>Sprinkler Systems in Residential Occupancies up to and Including/our Stories in Height, 2007 edition</i>
NFPA 14	<i>Standard for the Installation of Standpipes, Private Hydrant, and Hose Systems, 2007 edition</i>
NFPA 15	<i>Standard for Water Spray Fixed Systems for Fire Protection, 2007 edition</i>
NFPA 16	<i>Standard for the Installation of Foam-Water sprinkler and Foam-Water Spray Systems, 2003 edition</i>
NFPA 17 edition	<i>Standard for Dry Chemical Extinguishing Systems, 2002</i>
NFPA 17A edition	<i>Standard for Wet Chemical Extinguishing Systems, 2002</i>
NFPA 20	<i>Standard for the Installation of Stationary Pumps for Fire Protection, 2007 edition</i>
NFPA 22 edition	<i>Standard for Water Tanks for Private Fire Protection, 2003</i>
NFPA 24	<i>Standard for the Installation of Private Fire Service Mains and their Appurtenances, 2007 edition</i>

NFPA 25	<i>Standard for the Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems</i> , 2002 edition
NFPA 30	<i>Flammable and Combustible Liquids Code</i> , 2003 edition
NFPA 30A	<i>Code for Motor Fuel Dispensing Facilities and Repair Garage's</i> 2008 edition
NFPA 30B	<i>Code for the Manufacture and Storage of Aerosol Products</i> , 2007 edition
NFPA 33	<i>Standard for Spray Application Using Flammable or Combustible Materials</i> , 2007 edition
NFPA 34	<i>Standard for Standard D;pping and Coating Processes Using Flammable or Combustible Liquids</i> , 2007 edition
NFPA 35	<i>Standard for the Manufacture of Organic Coatings</i> , 2005 edition
NFPA 36	<i>Standard for Solvent Extraction Plants</i> , 2004 edition
NFPA 37	<i>Standard for the Installation and Use of Stationary Combustion Engines and Gas Turbines</i> , 2006 edition
NFPA 40	<i>Standard for the Storage and Handling of Cellulose Nitrate Film</i> , 2007 edition
NFPA 42	<i>Code for the Storage of Pyroxylin Plastic</i> , 2002 edition
NFPA 45	<i>Standard on Fire Protection for Laboratories Using Chemicals</i> , 2004 edition
NFPA 51	<i>Standard for the Design and Installation of Oxygen-Fuel Gas Systems for Welding, Cutting, and Allied Processes</i> , 2002 edition
NFPA 51A	<i>Standard for Acetylene Cylinder Charging Plants</i> , 2001 edition
NFPA 54	<i>National Fuel Gas Code</i> , 2006 edition
NFPA 55	<i>Standard for the Storage, Use, and Handling of Compressed Gases and Cryogenic Fluids in Portable and Stationary Containers, Cylinders, and Tanks</i> , 2005 edition
NFPA 58	<i>Liquefied Petroleum Gas Code</i> , 2004 edition
NFPA 59	<i>Utility LP-Gas Plant Code</i> , 2004 edition
NFPA 59A	<i>Standard for the Production, Storage, and Handling of Liquefied Natural Gas (LNG)</i> , 2006 edition
NFPA 61	<i>Standard for the Prevention of Fires and Dust Explosions in Agricultural and Food Processing Facilities</i> , 2002 edition
NFPA 68	<i>Guide for Venting of Deflagrations</i> , 2002 edition
NFPA 69	<i>Standard on Explosion Prevention Systems</i> , 2002 edition

NFPA 70	<i>National Electrical Code®</i> , 2005 edition
NFPA 72	<i>National Fire Alarm Code</i> , 2007 edition
NFPA 75 <i>Equipment</i> , 2003 edition	<i>Standard for the Protection of Information Technology</i>
NFPA 76 <i>Facilities</i> , 2005 Edition	<i>Standard for the Fire Protection of Telecommunications</i>
NFPA 80	<i>Standard for Fire Doors and Fire Windows</i> , 2007 edition
NFPA 82 <i>Systems and Equipment</i> , 2004 edition	<i>Standard on Incinerators and Waste and Linen Handling</i>
NFPA 85	<i>Boiler and Combustion Systems Hazards Code</i> , 2004 edition
NFPA 86	<i>Standard for Ovens and Furnaces</i> , 2007 edition
NFPA 88A	<i>Standard for Parking Structures</i> , 2007 edition
NFPA 91 <i>Gases, Mists, and Noncombustible Particulate Solids</i> , 2004 edition	<i>Standard for Exhaust Systems for Air Conveying of Vapors,</i>
NFPA 92B <i>Large Spaces</i> , 2005 edition	<i>Standard for Smoke Management Systems in Malls, Atria, and</i>
NFPA 96 <i>Commercial Cooking Operations</i> , 2004 edition	<i>Standard for Ventilation Control and Fire Protection of</i>
NFPA 99B	<i>Standard for Hypobaric Facilities</i> , 2005 edition
NFPA 99C	<i>Standard on Gas and Vacuum Systems</i> , 2005 edition
NFPA 101	<i>Life Safety Code®</i> , 2009 edition
NFPA 101B edition	<i>Code for Means of Egress for Buildings and Structures</i> , 2007
NFPA 102 <i>Tents, and Membrane Structures</i> , 2005 edition	<i>Standard for Grandstands, Folding and Telescopic Seating,</i>
NFPA 105 edition	<i>Standard for the Installation of Smoke Door Assemblies</i> , 2007
NFPA 110 edition	<i>Standard for Emergency and Standby Power Systems</i> , 2005
NFPA 111 <i>Power Systems</i> , 2005 edition	<i>Standard on Stored Electrical Energy Emergency and Standby</i>
NFPA 115	<i>Standard on Laser Fire Protection</i> , 2003 edition
NFPA 160 2006 edition	<i>Standard for the Use of Flame Effects before an Audience</i> ,
NFPA 170	<i>Standard for Fire Safety and Emergency Symbols</i> , 2006 edition

NFPA 204	<i>Standard for Smoke and Heat Venting</i> , 2002 edition
NFPA 214	<i>Standard on Water-Cooling Towers</i> , 2005 edition
NFPA 221	<i>Standard for High Challenge Fire Walls, Fire Walls, and Fire Barrier Walls</i> , 2006 edition
NFPA 230	<i>Standard for Fire Protection of Storage</i> , 2003 edition
NFPA 232	<i>Standard for the Protection of Records</i> , 2007 edition
NFPA 241	<i>Standard for Safeguarding Construction, Alteration, and Demolition Operations</i> , 2004 edition
NFPA 291	<i>Practice for Fire Flow Testing and Marking of Hydrants</i> , 2007 edition
NFPA 303	<i>Fire Protection Standards for Marine and Boatyards</i> , 2000 edition
NFPA 307	<i>Standards for the Construction and Fire Protection for Marine Terminals, Piers, and Wharves</i> , 2000 edition
NFPA 318	<i>Standard for the Protection of Semiconductor Fabrication Facilities</i> , 2006 edition
NFPA 418	<i>Standard for Heliports</i> , 2006 edition
NFPA 430	<i>Code for the Storage of Liquid and Solid Oxidizers</i> , 2004 edition
NFPA 432	<i>Code for the Storage of Organic Peroxide Formulations</i> , 2002 edition
NFPA 434	<i>Code for the Storage of Pesticides</i> , 2002 edition
NFPA 484	<i>Standard for Combustible Metals</i> , 2006 edition
NFPA 490	<i>Code for the Storage of Ammonium Nitrate</i> , 2002 edition
NFPA 495	<i>Explosive Materials Code</i> , 2006 edition
NFPA 499	<i>Recommended Practice for the Classification of Combustible Dusts and of Hazardous (Classified) Locations for Electrical Installations in Chemical Process Areas</i> , 2004 edition
NFPA 560	<i>Standard for the Storage, Handling, and Use of Ethylene Oxide for Sterilization and Fumigation</i> , 2002 edition
NFPA 654	<i>Standard for the Prevention of Fire and Dust Explosions from the Manufacturing, Processing, and Handling of Combustible Particulate Solids</i> , 2006 edition
NFPA 655	<i>Standard for Prevention of Sulfur Fires and Explosions</i> , 2007 edition
NFPA 664	<i>Standard for the Prevention of Fires and Explosions in Wood Processing and Woodworking Facilities</i> , 2002 edition

NFPA 704	<i>Standard System for the Identification of the Hazards of Materials for Emergency Response</i> 2007 edition
NFPA 720	<i>Standard for the Installation of Carbon Monoxide (CO) Warning Equipment in Dwelling Units</i> 2009 edition
NFPA 750	<i>Standard on Water Mist Fire Protection Systems</i> , 2006 edition
NFPA 780	<i>Standard for the Installation of Lightning Protection Systems</i> , 2004 edition
NFPA 801	<i>Standard for Fire Protection for Facilities Handling Radioactive Materials</i> , 2003 edition
NFPA 804	<i>Standard for Fire Protection for Advanced Light Water Reactor Electric Generating Plants</i> , 2006 edition
NFPA 850	<i>Recommended Practice for Fire Protection for Electric Generating Plants</i> , 2005 edition
NFPA 853	<i>Standard for the Installation of Stationary Fuel Cell Power Systems</i> , 2007 Edition
NFPA 1123	<i>Code for Fireworks Display</i> , 2006 edition
NFPA 1124	<i>Code for the Manufacture, Transportation, Storage and Retail Sales of Fireworks and Pyrotechnic Articles</i> , 2006 edition
NFPA 1125	<i>Code for the Manufacture of Model Rocket and High Power Rocket Motors</i> , 2007 edition
NFPA 1126	<i>Standard for the Use of Pyrotechnics before a Proximate Audience</i> , 2006 edition
NFPA 2001	<i>Standard on Clean Agent Fire Extinguishing Systems</i> , 2004 edition
NFPA 2010	<i>Standard for Fixed Aerosol Fire Extinguishing Systems</i> , 2006 edition

27-12 AUTOMATIC FIRE SPRINKLER PROTECTION

(2) **INSTALLATION REQUIRED.** An *Automatic Fire Sprinkler System* shall be installed in all structures where the floor area exceeds the thresholds established in Table 27-12(2) of the specific occupancy involved. For the purpose of determining square footage as it relates to the sprinkling of a building, firewalls shall not be considered area dividers unless the firewall is built in compliance with section 705 of the CBC

OCCUPANCY

Occupancy

Type	Type I	Type II	Type III	Type IV	Type V
E*	All	All	All	All	All
F2	5,000 SF	5,000 SF	3,000 SF	3,000SF	3,000 SF
I-2	All	All	All	All	All
I-3	All	All	All	All	All
I-4	All	All	All	All	All
R-4	All	All	All	All	All
U	5,000 SF	5,000 SF	3,000 SF	3,000 SF	3,000 SF

*excludes single family home day cares

(3) In addition an automatic sprinkler system shall be installed in all:

(a) Parking structures above and below ground with ceilings.

(b) CBRF's (Community Based Residential Facilities).

(c) Adult Family Homes.

(d) Throughout every building, new or existing, which by reason of its construction or combustible occupancy involves a life hazard to its occupants or in the judgment of the AHJ constitutes a fire menace.

(4) Mini warehouses and unattached multifamily parking garages. Throughout all buildings provided that they contain:

(a) Five thousand square feet or more in area on any floor or exceeding two stories. Any portion that the floor is below grade level

(6) Dormitories, fraternities and sorority houses. Throughout all buildings.

(7) When a sprinkler system is required by this chapter but not the Wisconsin Department of Commerce, at a structure that is not currently serviced by a municipal water source:

(b) Within ninety (90) days after a municipal water system becomes available, the sprinkler system shall be connected to the municipal water supply.

(8) ALL AUTOMATIC FIRE SPRINKLER SYSTEMS SHALL;

(a) Be monitored in accordance with NFPA 72.

(b) Have sprinkler control rooms located with adequate access for Fire Department, Sprinkler Maintenance and Inspection personnel and shall not be located within private dwellings with the exception of NFPA 13D systems.

(c) Have direct access from the exterior to the sprinkler control valve as determined by the AHJ.

(e) Have a bell (minimum ten inch) and Strobe located above the FDC in accordance to NFPA 13.

(f) The FDC must be at least forty (40) feet from all gas meters, electrical meters and transformers.

(g) Be designed for the hazard being protected or as specifically specified in this code and/or as directed by the AHJ.

(h) All automatic fire sprinkler systems hydraulic designs are to be based on ninety (90) percent available water supply (10% safety margin shall be maintained). All sprinkler systems designed shall be based on the most current approved water flow test conducted in accordance with NFP A 291.

(10) APPLICATION TO EXISTING BUILDINGS.

(a) Adult Family Homes and CBRFs regardless of number of occupants or class must be retrofitted with sprinkler protection acceptable to the AHJ.

(a) Where the AHJ finds that an existing building, because of current occupancy or a change in occupancy constitutes a hazard to its occupants or adjoining property, the AHJ may order compliance with the provisions of this section. A hazard shall be determined by the existence of one or more of the following conditions:

1. Any building which by reason of its construction or highly combustible occupancy involves a hazard to its occupants or, in the judgment of the AHJ, constitutes a fire menace, e.g., paint shop and other occupancies involving processing, mixing, storing, and dispensing of volatile liquids or solids.
2. Non-fire-resistive characteristics of a structure.
3. Accumulation of flammable or combustible materials.
4. Lack of accessibility to the premises for fire-fighting equipment.
5. Substantial number of fire calls or complaints on the premises.
6. Traffic patterns for pedestrian ingress and egress which require protection under this section.
7. Insufficient ventilation system.
8. Lack of an internal communication system, or due to the size or type of building making regulation fire department radio communication inoperable, the building owner is required to install a repeater system or something comparable to assist radio communications.
9. Number, characteristics and movement of employees which require protection under this section

(c) Installation of an automatic sprinkler system must be started within one year from the service of such orders and shall be completed within 180 days after construction has started.

(11) FIRE SPRINKLER CONTROL VALVE ACCESS

(a) All structures that have automatic sprinkler systems shall comply with the following:

1. Have sprinkler control rooms located with adequate access for fire department, sprinkler maintenance and inspection personnel.
2. Shall not be located within private dwellings with the exception of NFPA 13D systems.
3. Have direct access from the exterior to the sprinkler control valve(s) that is acceptable to the AHJ.

EXEMPTIONS. Any location where the installation of sprinklers may cause or increase an occupational hazard as determined by any governmental AHJ over such location or occupation.

27-14 MISCELLANEOUS CONSTRUCTION PROVISIONS

(6) FIRE ALARM SYSTEMS

(b) **INSTALLATION REQUIRED.** A Fire Alarm System shall be installed in all structures where the floor area exceeds the thresholds established in Table 27-14(4)(b) of the specific occupancy involved.

OCCUPANCY

Type	Type I	Type II	Type III	Type IV	Type V
E*	All	All	All	All	All
I-2	All	All	All	All	All
I-3	All	All	All	All	All
I-4	All	All	All	All	All
R-3	State Statutes apply				
R-4	All	All	All	All	All
S-1	3,000 SF	3,000 SF	3,000 SF	3,000 SF	3,000 SF
S-2	5,000 SF	5,000 SF	3,000 SF	3,000 SF	3,000 SF
U	5,000 SF	5,000 SF	3,000 SF	3,000 SF	3,000 SF

*excludes single family home daycares

(c) **MINIMUM SYSTEM REQUIREMENTS.** The following minimum system requirements shall be met when any occupancy type exceeds the limits in table 27-14(4)(b). Minimum system requirements shall include:

1. Audible Notification Appliances shall be installed throughout protected premises.
2. Visible Notification Appliances shall be installed throughout protected premises.
Exceptions:
 - a. Closets and/or other similar small storage rooms that do not exceed 50 square feet in floor area and are not normally occupied.
 - b. Normally unoccupied crawl spaces.
 - c. Normally unoccupied attic spaces.
 - d. Any non-accessible area.
 - e. Any area the AHJ deems Visible Notification Appliances are not required.
4. Manual Initiating Devices (pull stations) shall be located at all points of egress including all exit doors on every floor and/or building level.
5. Water flow detection devices shall be connected to the protected premises fire alarm system to specifically activate the notification device upon water flow.
6. Fire suppression system activation alarms shall be connected to the protected premises fire alarm system to specifically activate the notification appliances upon system activation. This

includes but is not limited to Wet Chemical, CO2, Clean Agent, Water Mist and Dry Chemical Systems.

7. Fire control and/or suppression systems supervisory condition indicators shall be connected to and monitored by the protected premise fire alarm system. This specifically includes but is not limited to: Valve Supervisory Switches (Tamper Switches), Low Air Switches, Low Water Switches, Low Temperature Switches, Fire Pump Condition Indicators and/or any other situation or condition deemed necessary by the AHJ.

8. *Fire Alarm Systems* shall be addressable and capable of indicating the status of all specific components connected to the system.

9. All *Fire Alarm Systems* shall be monitored by a service acceptable to the AHJ.

10. Fire alarm annunciators shall be installed in all protected premises. The number and locations of the fire alarm annunciators shall be acceptable to the AHJ

11. As determined by the AHJ, any additional notification and/or initiation appliances/devices may be required due to size, occupancy hazards, building construction, and/or occupancy use.

(f) SPECIAL REQUIREMENTS. On all buildings over four stories in height a Fire Command Center for fire department operations shall be provided. The Fire Command center shall comply with NFPA 72 and shall contain the features required in the International Fire Code and NFPA 1.

1. Two-way telephone communication service shall be provided for the fire department use. This system shall be in accordance with NFPA 72. The communications system shall operate between the central control station and every elevator car, every elevator lobby, and each floor level of exit stairs.

2. The requirements of NFPA 1 shall not apply where the fire department radio system is approved as an equivalent system. [NFPA 101]

(i) FIRE ALARM CONTROL PANELS. Shall display the status of the system components and be installed in a location acceptable to the AHJ. Adequate access for Fire Department, alarm maintenance, and inspection personnel shall be maintained. Fire alarm control panels shall not be located within private dwellings with the exception of one and two family dwellings.

(11) FIRE PUMP ROOMS REQUIREMENTS:

(a) All fire pump rooms at grade level must have at least one single door access and egress directly to the outside

(b) All egress doors must swing out from the fire pump.

(c) Must have an accessible aisle, a minimum of a 48 inch (4') aisle leading to the fire pump.

(d) Must provide accessible and clearly labeled valves and controls capable of being manipulated by a firefighter in full PPE including SCBA.

(e) Keys for all doors to the fire pump room must be labeled and in the "Access Box".

(17) STANDPIPES Fire Department Standpipes shall be provided in all new structures over two stories in height and in accordance with this section. The installation of stand pipes shall be in accordance with this Section and NFPA 14.

2. The location of standpipe connections shall be accessible and shall be located so that all portions of the building are within thirty (30) feet of a nozzle attached to one hundred (100) feet of hose.
3. When required by the AHJ, an approved standpipe shall be installed as construction progresses to make them available for Fire Department use in the top most floors constructed. Temporary standpipes shall be provided in place of permanent standpipes when required, during the period of construction on buildings over three stories in height.
4. The Fire Department Connections for the standpipe shall be approved by the AHJ.
5. The Fire Department Connections shall be located at least forty (40) feet from all electrical transformers, gas meters, or propane storage.
6. Temporary standpipes are required on buildings over three stories in height.

St. Francis

§ 245-1. State and national codes adopted.

A. All orders, rules and regulations of the Department of Safety and Professional Services, as are set forth in the Wisconsin Administrative Code as amended and renumbered from time to time, are hereby adopted and incorporated into this chapter by reference. Except as otherwise indicated in this chapter, this includes but is not limited to the International Building Code, the Fire Prevention Code, the Electrical Code, and all administrative codes not listed. The Fire Prevention Code (NFPA 1), the Life Safety Code (NFPA 101) and all the referenced standards are incorporated herein by reference and adopted as part of this chapter. The NFPA Codes and standards set forth in § 245-8 of this Code as amended and renumbered from time to time are adopted and incorporated into this chapter by reference.

B. It shall be the duty of the Fire Chief and the Chiefs authorized assistants to enforce all laws, orders, regulations and all other ordinances set forth in this chapter.

§ 245-6. Automatic fire sprinkler, fire suppression and fire alarm systems and fire hydrants.

C. State regulations. All Building Code requirements, rules and laws of the State of Wisconsin shall apply to all buildings located within the City of St. Francis, Wisconsin. The requirements of this section shall not lessen any Building Code requirements, rules or laws of the State of Wisconsin. Should any conflict arise between this section and the codes, rules or laws of the state, the more stringent regulation shall govern.

E. Where installed (classification of occupancies). See Table 1 at the end of this chapter.

F. How installed. Approved fire suppression systems and fire alarm systems shall be installed in accordance with current National Fire Protection Association (NFPA) standards and Wisconsin state codes.

H. Fire Department connection. The Fire Department connection (FDC) for both the sprinkler system and standpipe systems shall be located as approved by the Fire Department. The FDC shall be located within 150 feet travel distance of a fire hydrant. The FDC will be properly identified.

M. Additions, remodeled buildings, and change of use. All existing public buildings or places of employment and all additions shall conform to this section, as follows. All square footage remodeled

within a building subsequent to April 19, 1994. and all square footage added to such building after said date, shall be considered for purposes of determining the applicable requirements of this section.

(1) More than 50% remodeled or added. If more than 50% of the gross area of a building is remodeled and/or added, the entire building shall be provided with the requirements in this section, provided that the City determines that the existing water supply is adequate.

(4) Change of use or occupancy classification. If the use of an existing building is changed to a new use or the occupancy classification is changed, the building shall comply with the percentages established above and sprinklers shall be updated.

P. Fire alarm and detection systems. The application, installation, performance and maintenance of fire alarm and fire detection systems and their components shall comply with the Fire Alarm and Detection Systems Section of the International Building Code Chapter 907 as amended by Section SS 362.0907 of the Wisconsin Administrative Code, and Chapter SPS 314 of the Wisconsin Administrative Code NFPA 70, and NFPA 72 Note: Section 907 of the International Building Code contains exceptions where a separate manual fire alarm system (manual pull stations) is not required in some building groups. The City of St Francis does require a manual fire alarm system (manual pull stations) to be installed in all building groups.

Q. Automatic closing devices.

(1) Where installed.

(a) Except on single- and two-family dwellings, there shall be an automatic closing device on all fire and smoke doors, except doors leading directly outside in all buildings, regardless of size.

(b) On all fire shutters and vents.

(c) Wired into the fire alarm system when a fire alarm system is required.

(2) How installed. Per NFPA So, Fire Doors and Windows, and the Opening Protectives Section of the International Building Code, Section 715.

(3) How maintained and inspected. Per NFPA Standard 80, Fire Doors and Windows.

R. Fire alarm systems.

(1) A UL (Underwriters' Laboratories, Inc.) approved listed central station for fire shall monitor all fire suppression and detection systems.

(2) The signal for a fire alarm shall be sent to an approved listed central station for fire. The signal for tamper and/or supervision shall also be sent to the listed central station for fire.

(3) A minimum of one annunciator panel shall be placed in a location approved by the Fire Department

(4) The fire alarm system and the annunciator panel shall be addressable.

(5) The addressable system shall include fire detection and suppression systems, pull stations, tamper supervision, and audio/visual devices.

(6) In places of public occupancy, pull stations shall be required in new construction and during remodel projects.

(7) The owner shall maintain all fire alarm systems and monitoring of those systems that were a condition of occupancy. No system or part of a system or monitoring thereof can be removed without approval of the City. The owner who removes or causes to be removed the alarm system or monitoring of the alarm system shall be in violation of this section.

§ 245-8. Referenced publications.

The following documents or portions thereof are referenced as mandatory requirements and shall be considered part of the requirements of this chapter. The edition indicated for each referenced mandatory document of the NFPA shall apply.

NFPA 10	Standard for Portable Fire Extinguishers
NFPA 11	Standard for Low-Expansion Foam
NFPA 12	Standard on Carbon Dioxide Extinguishing Systems
NFPA 12A	Standard on Halon 1301 Fire Extinguishing Systems
NFPA 13	Standard for the Installation of Sprinkler Systems
NFPA 13D	Standard for the Installation of Sprinkler Systems in One- and Two-Family Dwellings and Manufactured Homes
NFPA 13R	Standard for the Installation of Sprinkler Systems in Residential Occupancies up to and Including Four Stories in Height
NFPA 14	Standard for the Installation of Standpipes and Hose Systems
NFPA 15	Standard for Water Spray Fixed Systems for Fire Protection
NFPA 16	Standard for the Installation of Foam-Water Sprinkler and Foam-Water Spray Systems
NFPA 17	Standard for Dry Chemical Extinguishing Systems
NFPA 17A	Standard for Wet Chemical Extinguishing Systems
NFPA 18	Standard for Wetting Agents
NFPA 18A	Standard for Water Additives for Fire Control and Vapor Mitigation
NFPA 20	Standard for the Installation of Stationary Pumps for Fire Protection
NFPA 24	Standard for the Installation of Private Fire Service Mains and Their Appurtenances
NFPA 25	Standard for the Inspection, Testing and Maintenance of Water-Based Fire Protection Systems
NFPA 30	Flammable and Combustible Liquids Code
NFPA 30A	Automotive and Marine Service Station Code
NFPA 30B	Code for the Manufacture and Storage of Aerosol Products

NFPA 31	Standard for the Installation of Oil-Burning Equipment
NFPA 32	Standard for Dry-Cleaning Plants
NFPA 33 Combustible Materials	Standard for Spray Application Using Flammable or
NFPA 34 or Combustible Liquids	Standard for Dipping and Coating Processes Using Flammable
NFPA 36	Standard for Solvent Extraction Plants
NFPA 40 Motion Picture Film	Standard for the Storage and Handling of Cellulose Nitrate
NFPA 45	Standard on Fire Protection for Laboratories Using Chemicals
NFPA 51 Systems for Welding Cutting and Allied Processes	Standard for the Design and Installation of Oxygen-Fuel Gas
NFPA 51A	Standard for Acetylene Cylinder Charging Plants
NFPA 51B Other Hot Work	Standard for Fire Prevention During Welding Cutting and
NFPA 52	Compressed Natural Gas (CNG) Vehicular Fuel Systems Code
NFPA 54	National Fuel Gas Code
NFPA 55 Gases and Cryogenic Fluids in Portable and Stationary Containers, Cylinders, and Tanks	Standard for the Storage, Use, and Handling of Compressed
NFPA 58	Liquefied Petroleum Gas Code
NFPA 59 Gases at Utility Gas Plants	Standard for the Storage and Handling of Liquefied Petroleum
NFPA 59A Liquefied Natural Gas (LNG)	Standard for the Production, Storage, and Handling of
NFPA 61 Agricultural and Food Products Facilities	Standard for the Prevention of Fires and Dust Explosions in
NFPA 69	Standard on Explosion Prevention Systems
NFPA 70	National Electrical Code
NFPA 72	National Fire Alarm Code
NFPA 75 Equipment	Standard for the Protection of Information Technology
NFPA 80	Standard for Fire Doors and Fire Windows
NFPA 82 Systems and Equipment	Standard on Incinerators and Waste and Linen Handling

NFPA 86	Standard for Ovens and Furnaces
NFPA 88A	Standard for Parking Structures
NFPA 90A Ventilating Systems	Standard for the Installation of Air-Conditioning and
NFPA 90B Conditioning Systems	Standard for the Installation of Warm Air Heating and Air-
NFPA 91 Gases, Mists, and Noncombustible	Standard for Exhaust Systems for Air Conveying of Vapors, Particulate Solids
NFPA 92	Standard for Smoke Control Systems
NFPA 96 Commercial Cooking Operations	Standard for Ventilation Control and Fire Protection of
NFPA 99	Standard for Health Care Facilities
NFPA 101	Life Safety Code
NFPA 102 Tents and Membrane Structures	Standard for Grandstands, Folding and Telescopic Seating.
NFPA 105 Other Opening Protectives	Standard for the Installation of Smoke Door Assemblies and
NFPA 110	Standard for Emergency and Standby Power Systems
NFPA 111 Power Systems	Standard on Stored Electrical Energy Emergency and Standby
NFPA 115	Standard for Laser Fire Protection
NFPA 120	Standard for Coal Preparation Plant
NFPA 140 Soundstages and Approved Production Facilities	Standard on Motion Picture and Television Production Studio
NFPA 150	Standard on Fire and Life Safety in Animal Housing Facilities
NFPA 160	Standard for Flame Effects Before an Audience
NFPA 170	Standard for Fire Safety and Emergency Symbols
NFPA 211 Burning Appliances	Standard for Chimneys, Fireplaces, Vents, and Solid Fuel-
NFPA 220	Standard on Types of Building Construction
NFPA 221	Standard for Fire Walls and Fire Barrier Walls
NFPA 232	Standard for the Protection of Records
NFPA 241 Demolition operations	Standard for Safeguarding Construction, Alteration, and

NFPA 400	Hazardous Materials Code
NFPA 1123	Code for Fireworks Display
NFPA 1124	Code for the Manufacture, Transportation, Storage, and Retail Sales of Fireworks and Pyrotechnic Articles
NFPA 1126	Standard for the Use of Pyrotechnics before a Proximate Audience

§ 245-13. Fire Department radio communication.

If the lack of an internal communication system or the size, design or construction of a building in the City of St. Francis causes regular fire department radio communication to be unavailable or, in the opinion of the Fire Chief, unreliable, the Fire Chief may direct the building owner to install a repeater system, or a comparable component, to assist radio communications.

245 Attachment 1

Table 1 Classification of Occupancies

4. Factory Industrial Group F.

Group F occupancies include, among others, the use of buildings or structure, or the portion thereof, for assembling, disassembling, fabricating, finishing, manufacturing, packaging, repair or processing operations that are not classified as a Group H hazardous occupancy.

(b) F-2 Low-Hazard Occupancy. Factory industrial uses that involve the fabrication or manufacturing of noncombustible materials which during finishing, packing or processing do not involve a significant fire hazard shall be classified as F-2 occupancies and shall include, but not be limited to, the following:

- Beverages (nonalcoholic)
- Brick and masonry
- Ceramic products
- Foundries
- Glass products
- Gypsum
- Ice
- Metal products (fabrication and assembly)

1. Sprinkler water flow, other suppression devices, smoke and heat detection equipment and manual pull stations shall be monitored by a listed central station for fire 24 hours a day throughout the building and the alarm when activated sent to a listed central station for fire.

2. Factory Industrial Group F-1 and F-2.

3. Throughout all Type V construction which is:

- a) Five thousand square feet or more in total area; or
- b) Over two stories in height.

4. Throughout all Type I, II, III and IV construction which is:

- a) Ten thousand square feet or more in total area; or
- b) Over two stories in height.

6. Institutional Group I.

Institutional Group I occupancy includes, among others, the use of a building or structure, or a portion thereof, in which people having physical limitations because of health or age are harbored for medical treatment or other care or treatment, or in which people are detained for penal or correctional purposes or in which the liberty of the occupants is restricted. Institutional occupancies shall be classified as I-1, I-2, I-3 or I-4.

(a) I-1. This occupancy shall include a building or part thereof housing more than 16 persons, on a twenty-four-hour basis, who, because of age, mental disability or other reasons, live in a supervised residential environment that provides personal care services. The occupants are capable of responding to an emergency situation without physical assistance from staff. This group shall include, but not be limited to, the following: residential board and care facilities, assisted-living facilities, halfway houses, group homes, congregate care facilities, social rehabilitation facilities, alcohol and drug centers and convalescent facilities. A facility such as the above with five or fewer persons shall be classified as Group R-3. A facility such as above housing at least six and not more than 16 persons shall be classified as Group R-4.

1) Sprinkler water flow, other suppression devices, smoke and heat detection equipment and manual pull stations shall be monitored by a listed central station for fire 24 hours a day throughout the building and the alarm when activated sent to a listed central station for fire.

2) Institutional group I-1, I-3 and I-4.

3) Throughout any building regardless of size.

(c) I-3. This occupancy shall include buildings and structures that are inhabited by more than five persons who are under restraint or security. An I-3 facility is occupied by persons who are generally incapable of self-preservation due to security measures not under the occupants' control. This group shall include, but not be limited to, the following: prisons, jails, reformatories, detention centers, correctional centers and prerelease centers. Buildings of the I-3 classification shall come under one of the five following conditions:

Condition 1. This occupancy condition shall include buildings in which free movement is allowed from sleeping areas, and other spaces where access or occupancy is permitted, to the exterior via means of egress without restraint. A Condition 1 facility is permitted to be constructed as Group R.

Condition 2. This occupancy condition shall include buildings in which free movement is allowed from sleeping areas and any other occupied smoke compartment to one or more other smoke compartments. Egress to the exterior is impeded by locked exits.

Condition 3. This occupancy condition shall include buildings in which free movement is allowed within individual smoke compartments, such as within a residential unit comprised of individual sleeping rooms and group activity spaces, where egress is

impeded by remote-controlled release of means of egress from such a smoke compartment to another compartment.

Condition 4. This occupancy condition shall include buildings in which free movement is restricted from an occupied space. Remote-controlled release is provided to permit movement from sleeping rooms, activity spaces and other occupied areas within the smoke compartment to other smoke compartments.

Condition 5. This occupancy condition shall include buildings in which free movement is restricted from an occupied space. Staff-controlled manual release is provided to permit movement from sleeping rooms, activity spaces and other occupied areas within the smoke compartment to other smoke compartments.

1. Sprinkler water flow, other suppression devices, smoke and heat detection equipment and manual pull stations shall be monitored by a listed central station for fire 24 hours a day throughout the building and the alarm when activated sent to a listed central station for fire.

2. Institutional Group I-1, I-3 and I-4.

3. Throughout any building regardless of size.

(d) I-4 day-care facilities. This group includes buildings and structures occupied by persons of any age who receive custodial care for less than 24 hours by individuals other than parents or guardians, relatives by blood, marriage, or adoption, and in a place other than the home of the person cared for. A facility such as the above with five or fewer persons shall be classified as a Group R-3. Places of worship during religious functions are not included.

Adult-care facility. A facility that provides accommodations for less than 24 hours for more than five unrelated adults and provides supervision and personal care services.

Child-care facility. A facility that provides supervision and personal care on less than a twentyfour- hour basis for more than five children 2 1/2 years of age or less shall be classified as Group I-4.

Exception: A child day-care facility that provides care for more than five but no more than 100 children 2 1/2 years or less of age, when the rooms where such children are cared for are located on the level of exit discharge and each of these child-care rooms has an exit door directly to the exterior shall be classified as Group E.

1. Sprinkler water flow, other suppression devices, smoke and heat detection equipment and manual pull stations shall be monitored by a listed central station for fire 24 hours a day throughout the building and the alarm when activated sent to a listed central station for fire.

2. Institutional Group 1-1, 1-3 and 1-4.

3. Throughout any building regardless of size.

10. Utility and Miscellaneous Group U.

Buildings and structures of an accessory character and miscellaneous structures not classified in any specific occupancy shall be constructed, equipped and maintained to conform to the

requirements of this code commensurate with the fire and life hazard incidental to their occupancy. Group U shall include, but not be limited to, the following:

- Agricultural buildings
- Aircraft hangars, accessory to a one- or two-family residence (see Residential Aircraft Hangars Section of the International Building Code Section 412.5)
- Barns
- Carports
- Fences more than six feet (1,829 mm) high
- Grain silos, accessory to a residential occupancy
- Greenhouses
- Livestock shelters
- Private garages
- Retaining walls
- Sheds
- Stables
- Tanks
- Towers

- 1) Sprinkler water flow, other suppression devices, smoke and heat detection equipment and manual pull stations shall be monitored by a listed central station for fire 24 hours a day throughout the building and the alarm when activated sent to a listed central station for fire.
- 2) Throughout all Type V construction which is:
 - a) Five thousand square feet or more in total area; or
 - b) Over two stories in height.
- 3) Throughout all Type I, II, III and IV construction which is:
 - a) Ten thousand square feet or more in total area; or
 - b) Over two stories in height.

Sturtevant

14.61 AUTOMATIC FIRE SPRINKLERS.

(2) **INSTALLATION REQUIRED.** Every building or structure hereafter constructed in the Village shall have an approved automatic sprinkler system installed and maintained when occupied in whole or in part for the following purposes:

- (g) Nursing, convalescent, old age and other like institutional buildings. Throughout all nursing, convalescent, old age and other like institutional buildings.
- (j) Hazardous properties. In buildings or structures the occupancy or use of which involves combustible, highly flammable or explosive material or that has characteristics that constitute a special fire hazard, including among others:

1. Aluminum powder factories.
2. Cellulose nitrate plastic factories.
3. Cereal mills.
4. Distilleries.

5. Explosives and pyrotechnics manufacturing.
6. Floor and feed mills.
- 7 Gasoline bulk plants.
8. Grain elevators.
9. Lacquer and paint factories and paint shops, linseed oil and varnish works.
10. L.P.G. bulk plants.
- 11 . Mattress factories.
12. Waste paper plants.
13. Aircraft hangers.
14. Chemical works.
15. Linoleum and oil cloth, shade, cloth manufacturing.
16. Oil refineries.
17. Pytoxlin plastic manufacturing and processing.
18. Other occupancies involving the processing, mixing, storage, and dispensing of volatile liquids.

(3) APPLICATION TO EXISTING BUILDINGS.

Where the Village Fire Chief finds that existing buildings which are used in whole or in part for the purposes set forth in sub. (2) above and which constitute a severe fire hazard to its occupants or to the adjoining property, he/she may require compliance with the provisions of this section, by the approval of the Village Board. Appeals from the decision of the Village Fire Chief may be made to the Village Board as provided in this Code.

(4) INSTALLATION.

(a) Approved automatic fire sprinkler equipment shall be installed in accord with the current edition of Pamphlet #13, entitled "Standards for the Installation of Sprinkler Systems," other applicable standards of the National Fire Protection Association and §Comm 51.23, Wis. Admin. Code or other applicable state regulations, all of which are in effect at the time of installation.

(b) Required automatic sprinkler systems shall be designed and constructed in conformity with good established practice. Reinstallation of used sprinkler heads is prohibited and other secondhand devices may be installed only by special permission of the Village Board.

(5) EXEMPTION AND SUBSTITUTION OF OTHER FIRE PROTECTION EQUIPMENT.

Nothing contained herein shall be construed as to require the installation of sprinklers in safe deposit or other vaults or in rooms or buildings devoted to the manufacture or storage of aluminum powder, calcium carbide, calcium phosphide, metallic sodium and potassium, quick lime, magnesium powder, sodium peroxide or like materials where the application of water may cause or increase combustion, nor in any other location where the installation of sprinklers may increase the hazard, or shall it be construed in any way to prohibit the substitution of other automatic protective equipment when approved by the Village Board.

Sun Prairie

8.12.020 - Fire Prevention Code.

A. Title; Adopted. This chapter shall be known as the "City of Sun Prairie Fire Prevention Code". The most current edition and any subsequent editions of the following are adopted by reference and made a part of the Sun Prairie Fire Prevention Code:

NFPA 1, Fire Prevention Code of the National Fire Protection Association and its incorporated standards and codes as published in the National Fire Codes of the National Fire Protection Association.

The following Wisconsin Administrative Codes:

SPS 305 - Licenses, Certifications, and Registrations

SPS 307 - Explosives and Fireworks

SPS 310 - Flammable, Combustible, and Hazardous Liquids

SPS 314 - Fire Prevention

SPS 316 - Electrical Standards

SPS 328 - Smoke Detectors and Carbon Monoxide Detectors

SPS 330 - Fire Department Safety and Health

SPS 340 - Gas Systems

SPS 343 - Anhydrous Ammonia

SPS 361 to 366 - Wisconsin Commercial Building Code

SPS 375 to 379 - Buildings Constructed Prior to 1914

In the case of conflict between any provisions in this chapter, the Wisconsin Administrative Code, or NFPA 1, the code containing the strictest provisions shall apply.

Superior

Sec. 54-3. - Fire prevention code adopted; scope.

There is adopted by the city for the purpose of prescribing regulations governing conditions hazardous to life and property from fire or explosion, the 2001 Edition of the Wis. Admin. Code chapter COMM 14 Fire Prevention or the most current successor edition thereof and the whole thereof and any other codes therein adopted by reference and save and except such portions as deleted, modified or amended in this article, of which code not less than three copies have been and now are filed in the office of the city clerk, and the same are adopted and incorporated as fully as if set out at length herein, and from the date on which the ordinance from which this section was derived shall take effect, the provisions thereof shall be controlling within the limits of the city.

Sec. 54-32. - Approval.

A smoke detector required by this article shall be listed by Underwriters Laboratories, Inc. Required smoke detectors shall be installed according to the directions and specifications of the manufacturer of the smoke detector so as not to void the listing.

Sec. 54-33. - Required installation.

The installation requirements of this section within the City of Superior are more restrictive than the statutory requirements of the State of Wisconsin in accord with SPS 314.01(6)(b).

(2) *Commercial residential building.* The owner, landlord, manager or agent of any commercial residential building which is used for sleeping or lodging purposes and includes any apartment house, multi-family dwelling, motel, hotel, rooming house, dormitory, row house, condominium, children's home, community-based residential facility or building with similar sleeping areas shall install a smoke detector in each bedroom, in each sleeping area of each unit outside of the bedroom, in the basement and at the head of the stairway on each floor level of the building. Smoke detectors with battery power only are acceptable within commercial residential buildings or residential units constructed prior to January 1, 1982. Commercial residential buildings or residential units constructed on or after January 1, 1982, shall have smoke detectors powered by the building electrical system. Commercial residential buildings or residential units constructed on or after April 1, 1995, shall have smoke detectors powered by the building electrical system with additional battery backup. Commercial residential buildings or residential units constructed on or after July 1, 2002, shall have the smoke detectors interconnected within the unit.

(4) *Smoke detector replacement.* The owner, landlord, manager or agent of any duplex, multi-family dwelling, motel, hotel, rooming house, dormitory or non-owner occupied single-family residence where battery operated smoke detectors have been installed not meeting the requirements of this section, shall replace the detectors with detectors meeting the requirements of this section before January 1, 2008.

(6) *Additional installations.* A battery powered smoke detector with a non-replaceable, non-removable battery capable of powering the device for a minimum of ten years without replacement shall be accepted to meet additional smoke detector installation requirements due to the more stringent requirements of this ordinance where existing building wiring is not installed to serve the smoke detector within these additional required installation spaces.

(7) *Commercial property with residence attached.* Effective July 1, 2000, any commercial property having residential units above or adjacent thereto shall provide heat detectors or smoke detectors on the main floor and in the basement and in storage areas interconnected to sounding devices or horn/strobes on each floor above or adjacent to the commercial property with residential units. All installations and components thereof shall meet the requirements of the International Building Code (IBC) § 907.2.10 as adopted by the Wis. Admin. Code chapter SPS 361 or of the National Fire Protection Association (NFPA) 72. All sounding devices or horn/strobes must meet the requirements of the National Fire Prevention Association (NFPA) 72. The distance between any apartment egress door and a sounding device or horn/strobe shall not exceed 30 feet.

(8) New residential buildings, whether one- or two-family dwellings, mobile homes, or commercial residential buildings shall meet the minimum smoke detector installation standards of this article and the minimum standards of the adopted building code applicable to the structure at the time of construction.

(9) Altered or remodeled residential units or altered structures creating a new residential unit(s) shall meet the minimum smoke detector installation standards of this article and the minimum standards of the adopted building code applicable to the altered or remodeled portion of the structure at the time of alteration or remodel.

Sec. 54-34. - Smoke detector location.

Smoke detector and heat detector location requirements specified within this article are general in nature and are applicable to most situations. All installations are subject to the approval or disapproval of the

building inspector, housing inspector or fire inspector due to unusual room layout, ceiling/wall configuration or other circumstance not included or adequately described in the following directives:

- (1) Detectors shall be installed at locations within the residential buildings identified in section 54-33 of this article.
- (2) Detectors shall be installed according to the installation instructions of the manufacturer.
- (3) Corners shall be avoided when installing detectors on flat ceilings.
- (4) The distance from the ceiling to the closest edge of the detector shall not exceed 12 inches for wall mounted installations within spaces with flat ceilings.
- (5) The distance from the upper most portion of the ceiling to the closest edge of the detector shall not exceed 12 inches vertical for installations within spaces with tray-shaped ceilings.
- (6) Detectors shall be located within 36 inches of the peak, measured horizontally for peaked or vaulted ceilings and not within four inches of the peak measured vertically.
- (7) Detectors shall be located within 36 inches of the high side of a sloped or shed type ceiling measured horizontally and not within four inches of the highest portion of the sloped ceiling measured vertically.
- (9) Unless tested and listed for recessed mounting, detectors shall not be recessed into the mounting surface.
- (10) Where partitions extend to within 15 percent of the ceiling height, the spaces separated by the partitions shall be considered as separate rooms.
- (11) A required detector located at the head of a stairway which is separated from the remaining common area space on that floor level by a door or similar obstruction shall not meet the location requirement for placement on that floor level but an additional smoke detector shall be installed within the space.
- (12) Smoke detectors shall not be located where ambient conditions, including humidity and temperature, are outside the limits specified by the manufacturer's published instructions.
- (13) Smoke detectors shall not be located within unfinished attics or garages or in other spaces where temperatures can fall below 40 degrees F or exceed 100 degrees F.
- (14) Where the mounting surface could become considerably warmer or cooler than the room, such as a poorly insulated ceiling below an unfinished attic or an exterior wall, smoke detectors shall be mounted on an inside wall.
- (15) Smoke detectors shall not be installed within a 36-inch horizontal path from the tip of the blade of a ceiling-suspended (paddle) fan.
- (16) For stairways leading up from a basement, smoke detectors shall be located on the basement ceiling near the entry to the stairs.

Smoke detectors and heat detectors required by this article shall be so installed as to comply with the location requirements of the National Fire Protection Association (NFPA) 72. If any portion of any above directive is in conflict with the location requirements of NFPA 72, the requirements of NFPA 72 shall be followed.

Sec. 54-83. - Fire department connection location.

The FDC shall be so located as to comply with the following requirements:

- (1) The FDC shall be located on the side of the building facing the street of address.
- (2) The FDC shall be located adjacent to the main entry to the building.

Exception: The FDC may be located at a location other than adjacent to the main entry of the building provided that the location meets with the approval of the fire department.

- (3) The FDC shall be located within 150 feet walking distance of the closest fire hydrant.
- (4) Access to the FDC from the public way shall be clear of obstructions including accumulations of snow.
- (5) The FDC shall be located in such a way as to comply with the requirements of all current building codes.

Sec. 54-94. - Rated enclosure.

(a) All fuel-fired appliances installed in buildings covered by the scope of this subsection and which were constructed before July 1, 2002 shall be installed in a one hour rated enclosure.

Exception: Fuel-fired appliances designed with a sealed combustion chamber shall not be required to meet the requirements of subsection 54-94.

(b) All fuel-fired appliances installed in buildings covered by the scope of this subsection and which were constructed on or after July 1, 2002 being less than 400,000 BTUs need not meet the requirements of subsection 54-94(a) but must comply with the requirements of the 2000 edition of the International Building Code 302.1 or its successor code.

Sussex

5.15 GENERAL PROVISION.

(2) STATE CODES ADOPTED. In addition to the regulations, standards and procedures herein set forth, there shall be compliance with provisions of the Wisconsin Administrative Code and regulations of the State Department of Commerce all of which are hereby made a part of this section by reference; provided if there is conflict or ambiguity concerning any of the foregoing, the stricter provision shall apply.

(3) APPLICATION OF CODE.

(a) The provisions of the Fire Prevention Code shall apply equally to new and existing conditions except existing conditions not in strict compliance with the terms of the Fire Prevention Code shall be permitted to continue where the exceptions do not constitute a clear hazard to life or property.

5.16 AUTOMATIC SPRINKLER SYSTEMS.

(2) WHERE INSTALLED. After November 25, 1975, every building constructed, every building structurally altered, every building remodeled, or every building whose use has changed, according to Subsection (8) below, shall have an approved automatic sprinkler system installed and maintained when occupied in whole or in part as follows:

(d) This classification includes but is not limited to all public and private schools, universities, colleges, academies, seminaries, libraries, museums and art galleries; including all buildings or parts of buildings used primarily for instructional purposes.

1. Throughout all Fire-Resistive and Non-Fire-Resistive buildings.

(e) This classification includes but is not limited to all residential buildings, health care facilities, hospitals, nursing homes, elderly or retirement complexes, multi-family apartments and condominiums, community based residential facilities, hotels, motels, bed and breakfasts, day care centers, correctional and detention centers.

1. Throughout all Fire-Resistive and Non-Fire-Resistive buildings.

(f) This classification includes but is not limited to all buildings used as high hazardous occupancies, storage occupancies and repair and public garage occupancies.

1. Throughout all Fire-Resistive and Non-Fire-Resistive buildings.

2. Throughout all Fire-Resistive and Non-Fire-Resistive garages used to store transportation vehicles above or below other occupancies.

(g) This classification includes all basements.

1. Throughout all Fire-Resistive and Non-Fire-Resistive basements and cellars when used for manufacture, storage or sale of goods, materials or merchandise.

(3) EXCEPTIONS. The following classes of buildings shall be exempt from Section 5.16 of this ordinance.

(a) Any portion of a building housing a process or material which would interact with water to create a greater fire hazard than without water, provided an alternate fire suppression system is used.

(b) The Fire Department may approve the equivalent of an automatic sprinkler system in a building where an automatic sprinkler system is impossible or impracticable to install. The equivalent shall depend on the type of occupancies, and the type of structure. Smoke detectors and/or other fire protection devices may be required.

(e) Buildings constructed prior to November 25, 1975 that are structurally altered, remodeled, or whose use changes, provided all of the following conditions are satisfied:

1. The building was within the Village Limits of the Village of Sussex as of July 12, 1994;

2a. At least twenty five percent (25%) of the gross area of the existing building, excluding basements, has not been remodeled; or

2b. The building is damaged by fire, explosion, or flood.

3. The gross area of the building, not including the area of the basement and the area occupied by the owner's private residence, does not exceed 5,000 square feet;

4. The building does not exceed two levels;

5. The building is not used as an Arena, Field House, Gymnasium, or Lodge Hall;

6. An NFPA 72 compliant fire alarm system is installed throughout the building and monitored by a central station fire alarm system company.

(4) FIRE DEPARTMENT HOSE CONNECTIONS.

(a) Every automatic sprinkler system installed in new or existing buildings shall be equipped with at least one Fire Department hose connection at a location approved by the Fire Chief.

(5) HOW INSTALLED.

(a) An approved automatic fire sprinkler system shall be installed in accordance with the current edition of NFPA 13, "Standards for the Installation of Sprinkler Systems" and other applicable standards of the NFPA.

(e) Automatic fire sprinkler systems shall include an alarm system that is monitored or supervised so that the fire department is immediately notified of system activation or water flow.

(f) All residential buildings shall have either quick response or residential quick response heads within all living units.

(6) INTERIM INSTALLATIONS.

(a) Until a municipal water supply is available to serve a building in which installation of an automatic sprinkler system is required, connection of the system to a water supply shall not be required; however, all design characteristics of systems installed under this section shall include provisions for eventual connection to a municipal water supply. In areas where there is no municipal water:

1. The sprinkler system is required to be connected to domestic water at the time of installation.

2. When municipal water becomes available, the owner will have six months to hook up the automatic sprinkler system to the municipal mains.

In addition, such interim installations shall also include:

1. One or more Fire Department connections with two 2-1/2" female couplings with National standard threads attached to a header of adequate size in accordance with fire protection engineering standards, but not less than 4" to supply the system, and

2. An automatic fire detection and alarm system of a type approved by the State Department of Commerce.

(b) All automatic fire sprinkler systems installed under the requirements of this section shall be connected to the municipal water system and be operational prior to obtaining occupancy in new construction, and shall be connected to the municipal water system and operational within six months after water mains to serve the building are available for use in buildings structurally altered, remodeled or whose use has changed under the requirements of Subsection (8).

(8) APPLICATION TO EXISTING BUILDINGS.

(a) "Structurally altered." If a building is structurally altered, the entire building shall be made to comply with Section 5.16 of this ordinance.

(b) "Change of Use." If the use of a building changes to a use listed in Section 5.16(2) of this Code, the entire building shall be made to comply with Section 5.16 of this ordinance prior to occupancy.

(c) "Remodeling." If more than fifty percent (50%) of the gross area of an existing building is remodeled, the entire building shall be made to comply with Section 5.16 of this ordinance.

5.18 MISCELLANEOUS PROVISIONS

(5) COMMERCIAL AND INSTITUTIONAL KITCHENS. All commercial and institutional kitchens shall have a UL Approved hood and duct extinguishment system as approved by the State Insurance Services Office. The system shall also be provided with an automatic fuel cut-off.

Theinsville

Sec. 34-82. - Code adopted.

This division shall be known as the village fire prevention code. This code adopts NFPA-1 fire prevention code and NFPA-101 Life Safety Code of the National Fire Protection Association, as the same may from time to time be amended, and its incorporated standards and codes as published in the National Fire Codes of the National Fire Protection Association, the state department of industry, labor and human relations and listed in appendix A of the NFPA fire prevention code, except those portions which are amended by section 34-83. At least one current copy of NFPA-1 fire prevention code and NFPA-101 Life Safety Code of the National Fire Protection Association and the provisions of the National Fire Codes shall be filed in the office of the fire prevention bureau.

Sec. 34-83. - Additional codes adopted.

(a) *National codes adopted.* The appendices of the NFPA-1 Fire Prevention Code and NFPA-101 Life Safety Code of the National Fire Protection Association, as the same may be from time to time amended, are hereby included as a part of the village fire prevention code, except those portions which are deleted, modified or amended by this section. The same are hereby adopted and incorporated as fully as if set out in length. Each of the following codes and standards published by the National Fire Protection Association are adopted in their entirety as a supplement and addition to the text of this fire prevention code.

NFPA Standard	General Subject	Latest NFPA
1	Fire Prevention Code	2000
10	Portable Fire Extinguishers	1998
13	Installation of Sprinkler Systems	1999
13D	Installation of Sprinkler Systems in One and Two Family Dwellings and Mobile Homes	1999
13R	Installation of Sprinkler Systems in Residential Occupancies up to Four Stories in Height	1999
14	Standpipes and Hose Systems	2000

15	Water Spray Fixed Systems	1996
20	Installation of Centrifugal Fire Pumps	1999
22	Water Tanks for Private Fire Protection	1998
24	Installation of Private Fire Service Mains	1995
25	Inspection, Testing and Maintenance of Sprinkler Systems	1998
30	Flammable and Combustible Liquids Code	1996
31	Installation of Oil Burning Equipment	1997
54	National Fuel Gas Code	1999
58	Liquefied Petroleum	1998
72	Installation, Maintenance and Use of Signaling Systems for Central Station Service	2002
72	Installation, Maintenance and Use of Local Protective Signaling Systems	2002
72	Automatic Fire Detectors	2002
72	Installation, Maintenance and Use of Notification Appliances for Protective Signaling Systems	2002
72	Testing Procedures for Local, Auxiliary, Remote Station and Proprietary Protective Signaling	

	Systems	2002
72	Household Fire Warning Equipment	2002
90A	Installation of Air Conditioning and Ventilating Systems	1999
101	Life Safety Code	2000
211	Chimneys, Fireplaces, Vents and Solid Fuel Burning Appliances	2000
230	General Storage	1999
230.5	Rack Storage of Materials	1999

(b) *State codes adopted.*

(1) The current issues of the following orders and codes of the Wisconsin Administrative Code, rules of the department of industry, labor and human relations, are hereby adopted by reference and made a part of the village fire prevention code:

- a. Chapter Comm 7, Explosives and Blasting Agents (Wis.).
- b. Chapter Comm 9, Cleaning and Dyeing (Wis.).
- c. Chapter Comm 10, Flammable and Combustible Liquids (Wis.).
- d. Chapter Comm 40, Liquefied Petroleum Gases (Wis.).
- e. Chapter Comm 14, Fire Prevention Code (Wis.).
- f. Chapter Comm 16, Wisconsin State Electrical Code, Volumes 1 and 2.
- g. Chapter Comm 28, Spray Coating (Wis.).
- h. Chapter Comm 61-65, Building Code (including Heating, Ventilating and Air Conditioning) (Wis.).
- i. Chapter Comm 70, Wisconsin Historic Building Code.

(2) Whenever the provisions of the aforementioned codes conflict, the stricter interpretation shall apply.

Sec. 34-121. - Automatic fire sprinkler systems.

(c) *Where required.* Every building constructed or structurally altered, (including partition walls) over 50 percent, as determined by the fire inspector, shall have approved automatic sprinkler system installed and maintained when occupied in whole or part for the following purposes:

(4) *Hotels.* Throughout entire building regardless of gross area.

(6) *Multiuse buildings.* Throughout the entire building that has business and living space. Standards set forth for multifamily dwellings shall apply.

(8) *Hospitals and other institutional buildings.* Throughout every building.

(9) *Schools.* Throughout every building.

(10) *Public buildings.* Throughout every building if over 3,000 gross square feet.

(12)

a. All kitchen exhaust hoods and ducts for cooking equipment must be sprinkled or must have an approved automatic extinguishing system installed.

(13) *Attics.* In any of above building occupancies requiring sprinklers.

a. All wood structure attic spaces, including attics in NFPA 13 or 13R or similar buildings, must be protected with automatic sprinklers.

(d) *Application to existing buildings.*

(1) Where the fire department finds that by reason of construction or highly combustible occupancy, existing buildings constitute a severe hazard to its occupants or to adjoining property.

(2) An existing building has a change in use, so that the building is being used differently than it previously was.

(3) Additions, regardless of costs, made to an existing building shall comply with the requirements of this article for new buildings.

(e) *Type of system and approval of plans.*

(1) *To be in compliance with national code.* Approved automatic sprinkler equipment shall be installed, connected to adequate water supply with sprinkler heads, valves and auxiliary equipment of standard types suitable for the individual buildings to be protected as determined by NFPA standard 13 in effect at the time of installation.

(f) *Exemption and substitution of other fire protection equipment.* Nothing contained in this section shall be construed as to require the installation of sprinklers in safe deposit or other vaults or in rooms or building devoted to the manufacture or storage of aluminum powder, calcium carbide phosphide, metallic and potassium, quicklime, magnesium powder, sodium peroxide or like materials where the application of water may cause or increase combustion, or in any other location where the installation of sprinklers may increase the hazard, nor shall it be construed in any way to prohibit the substitution of other automatic protective equipment when approved by the fire department.

(h) *Installation and maintenance.*

(1) *Generally.* Automatic sprinkler systems shall be installed and maintained in operable condition set forth in Article 5.21. The State Building Code Comm 61-65 and Comm 66 Multi-Family Code

shall apply to all new buildings and existing buildings within the Village of Thiensville as it pertains to automatic fire sprinkler systems.

(2) *Installation.* The installation of any automatic fire sprinkler systems shall be completed in accordance with NFPA 13, Installation of Sprinkler Systems, as the same may be amended from time to time, and NFPA 13 and 13R.

a. Most fire department connections will have 2½ inch NHT inlets, however, a five-inch storz connection may be required in lieu of the 2½-inch connection on any specific building should the fire department authority deem necessary. It is the responsibility of the contractor to confirm with the fire department authority, which will be utilized. All inlets must be properly capped, preferably with plastic breakable caps.

b. All fire department connections must be adjacent to and accessible by roadway frontage, paved driveway, or paved parking area and must not be a greater distance than 150 feet from the nearest fire hydrant, or TFD approved water source. Also, the fire department connection must be completely visible from the said access point and must not be hidden or obstructed in any way.

c. Electric supervisory tamper switches must be installed on all system control valves.

(i) *New sprinkler system test requirements.* All new sprinkler systems shall be tested and inspected prior to the building being occupied. Testing and inspection shall conform to the requirements below:

(2) All multifloor buildings must be zoned per floor with each floor containing a separate control value assembly, water flow switch, and main drain / inspector's test connection with water psi gauge. Any other special zoning requirements for multifloor or single floor buildings is at the discretion of the fire department authority and must be confirmed by the contractor.

(k) *Automatic sprinkler systems.* Automatic sprinkler systems shall meet all the requirements of NFPA 13 and 13R and in addition:

(1) *System drain.* The automatic sprinkler system shall have a drain piped to the outside of the building or to a drain suitable to handle the required flows.

(2) *Inspector's test valve.* The system shall have an inspector's test valve piped so as to discharge to the outside of the building.

(3) *Alarm bells or horns.* Alarm bells or horns shall be installed on all systems. A six-inch electric alarm bell must be installed inside the building at the riser location and a ten inch electric bell must be installed outside the building above the fire department connection. The sprinkler alarm shall be connected to the building alarm system.

Sec. 34-122. - Standpipe and hose systems.

(b) *Installation.* Wet standpipes with 2½-inch fire hose valves at each floor in all enclosed exit stairwells (or where determined by the Fire Department Authority) will be required for each building two stories or higher (not including a basement floor). Standpipes will be allowed to be four inches in size without hydraulically calculating. If, however, standpipes are required per state codes, they must be hydraulically calculated per state code and NFPA 14 requirements.

Sec. 34-123. - Fire extinguishers.

(c) *Location of extinguishers.* Fire extinguishers shall be conspicuously located where they will be readily accessible and so distributed as to be immediately available in the event of fire. They shall be hung on hangers or set in brackets so that the top of the extinguisher is not more than five feet above the floor.

Sec. 34-133. - Occupancies other than residential.

(a) *NFPA standards compliance.* For all occupancies other than residential dwelling units, the term "fire alarm system" shall mean a protective signaling system installed in accordance with NFPA 72, Standard for the Installation, Maintenance and Use of Protective Signaling Systems. The fire alarm system shall include automatic fire detectors (smoke and heat detectors) installed in accordance with NFPA 72, Standard on Automatic Fire Detectors. These detectors shall protect either selected areas or be installed throughout the building as specified in this code.

(c) *Central station monitoring service requirement.* A central monitoring service shall comply with NFPA 72, Standard for Installation, Maintenance and Use of Signaling Systems for Central Station Service. The central monitoring service is subject to prior approval by the fire prevention bureau. The fire alarm system shall be monitored 24 hours a day by a central monitoring service.

(1) All buildings requiring a fire alarm or sprinkler system shall have 24-hour monitoring service. All fire alarms and tamper switches must be monitored by a NFPA compliant and approved 24-hour central monitoring station that will notify the fire department of any trouble alarm. Also, in a building with zoned sprinkler systems, a fully addressable fire panel indicating the location of the actuated flow devices shall be located at grade level at the normal point of fire department access and/or a constantly attested building security control center. This includes:

- b. Schools.
- c. Residential facilities.
- e. Multiuse buildings.
- g. Hazardous occupancies.

(d) *Agency listings.* All equipment shall bear the UL marking or other recognized listing and testing agency and shall be clearly marked on the equipment. All detectors shall be listed for commercial applications.

Sec. 34-134. - Where alarm systems required

(a) *Generally.* The requirements for this section shall be retroactive for all buildings, except hotels, motels, bed and breakfast inns, child day care facilities, schools and residential units of three or more, which shall follow the requirements of Comm 62.0202.

(b) *Multifamily buildings of three or more dwelling units, including row houses, hotels, motels, bed and breakfast inns and any other places of residence with three or more units.*

(3) *Buildings of eight units or more, including all hotels and motels.*

- a. All new and existing buildings shall have the same requirements as set forth in this section.
- b. The fire alarm system shall be separated into zones and each zone identified in the alarm panel. Separate zones are required for smoke detectors on each floor level, attic, basement

and all pull stations. The minimum number of zones shall be reviewed and approved by the fire prevention bureau.

c. Pull stations shall be required in accordance with NFPA 72.

(c) *Office, factory and mercantile buildings.*

(2) *Existing buildings.*

a. Existing buildings over 5,000 square feet total area shall have a fire alarm system with smoke and heat detectors in hallways, stairwells, exit paths, and hazardous locations as defined by Comm 62.0202.

b. If there are 20 or more persons regularly occupying or working above or below the exit floor, the building shall have a fire alarm system installed throughout.

c. Existing buildings 10,000 square feet or more area shall have a fire alarm system installed throughout.

(3) *Schools.*

a. *New construction.* All new schools regardless of size shall have a fire alarm system installed throughout.

b. *Existing construction.* The requirements for existing construction shall follow NFPA 72 or its amendments as they apply to schools and places of instruction.

(4) *Theaters and assembly halls, including churches.*

a. *New construction.* All buildings, regardless of size, shall have a fire alarm system installed throughout.

b. *Existing construction.* All buildings, regardless of size, shall have a fire alarm system installed throughout.

c. *Exemptions.* Sanctuary and nave (central hallway) area of church buildings and similar places of worship shall be exempt.

(5) *Health care facilities.* Health care facilities shall conform to the requirements of NFPA-101 Life Safety Code. In addition, smoke detectors shall be located in all sleeping rooms and corridors.

(6) *Child day care facilities.* Child day care facilities shall conform to the requirements of NFPA-101 Life Safety Code, and more specifically, a smoke detection system shall be installed.

(7) *Hazard occupancy.* Any new high hazard occupancy determined to be a severe life or property hazard by the fire prevention bureau shall have a fire alarm system installed with detectors located as specified by the fire prevention bureau. Connection to a central monitoring service will also be required.

Sec. 34-135. - Installation requirements.

(a) *Generally.* The entire alarm system installation shall conform to the applicable National Fire Protection Association (NFPA) standards 72 and to State of Wisconsin Comm 28. Electrical installations shall conform to all local and State of Wisconsin Code, Comm 16, NFPA 70 and to the National Electrical Code.

(b) *Smoke and heat detector locations.*

- (1) Smoke and heat detectors shall be chosen and located in accordance with NFPA 72, either throughout the building or in specific areas of the building as specified in this code.
- (2) For hazardous locations, the term "smoke and heat detectors" shall include flame detectors. Flame or heat detectors may be required at hazardous locations both inside and outside the building, including loading docks and other hazardous areas.

Union Grove & Yorkville

Sec. 46-21. Automatic fire sprinkler, fire suppression and fire alarm systems and fire hydrants.

(c) State regulations. All building code requirements, rules and laws of the state shall apply to all buildings located within the village/town. The requirements of this section shall not lessen any building code requirements, rules or laws of the state. Should any conflict arise between this section and the codes, rules or laws of the state, the more stringent regulation shall govern .

(e) Installation required. An automatic fire sprinkler System shall be installed in all structures where the floor area exceeds the thresholds established the Wisconsin Administrative Code, or where otherwise required by State law.

(f) How installed.

(1) Incorporation of standards by reference. The most current editions of all NFPA documents are hereby incorporated by reference into this section.

(4) Fire pump test header. Fire pump test headers shall be placed on the exterior of the fire pump room.

(5) Fire pump relief valve. When a fire pump is required to have a relief valve and that relief valve discharges to the exterior, the relief valve shall discharge directly into a storm water catch basin.

(6) Safety factor. The safety factor for a hydraulically calculated sprinkler system shall be a minimum of ten percent or five psi, whichever is greater.

(7) Sprinkler control rooms shall be located with adequate access for fire department, sprinkler maintenance and inspection personnel and shall not be located within private dwellings with the exception of NFPA 13D systems.

(8) There shall be direct access from the exterior to the sprinkler control valve as determined by the AHJ, with a door labeled as such which will include reflective lettering.

(g) Standpipes and hose connections.

(1) Wet automatic standpipes shall be provided in all buildings three stories or more in height. Standpipes shall be sized and distributed as described in subsection (2).

(h) Fire department connection. The fire department connection (FDC) for both the sprinkler system and standpipe systems shall be located remote from the building, curbside to a street or driveway. The minimum distance from the building shall be equal to the height of the building. An FDC may be placed at a greater distance from the building if the building is of extra hazard occupancy. The location of the FDC shall be approved by the fire department. The FDC shall have an automatic drip for drainage of the

waterline enclosed within an inspection pit and accessed through a manhole, when the automatic drip cannot be placed within the structure.

(k) Strobe light.

(1) A red strobe light shall be placed in the vertical position above the audible water flow alarm. The light shall be activated by a sprinkler water flow. Additional strobe lights will be required on the exterior of buildings that have multiple sprinkler (risers in multiple locations) systems.

(2) Strobe specifications. The following strobe lights are acceptable for use: Federal, Model 131 ST/DST and Whelen, Model 1550. Alternate manufacturers must be approved by the department prior to installation.

(p) Automatic closing devices.

(1) Where installed.

a. Except on single and two-family dwellings, there shall be an automatic closing device on all fire and smoke doors, except doors leading directly outside in all buildings, regardless of size.

b. On all fire shutters and vents.

c. Wired into the fire alarm system when a fire alarm system is required.

(2) How installed. Per National Fire Protection Association Standard 80, Fire Doors and Other Opening Protectives.

(3) How maintained and inspected. Per National Fire Protection Association Standard 80, Fire Doors and Other Opening Protectives.

(q) Fire alarm systems.

(1) *Minimum system requirements.* When a fire alarm system is required, the following minimum system requirements shall be met:

a. Audible notification appliances shall be installed throughout protected premises.

b. Visible notification appliances shall be installed throughout protected premises.

Exceptions:

1. Closets and/or other similar small storage rooms that do not exceed 50 square feet in floor area and are not normally occupied.

2. Normally unoccupied crawl spaces.

3. Normally unoccupied attic spaces.

4. Any non-accessible area.

5. Any area the AHJ deems visible notification appliances are not required.

d. Manual initiating devices (pull stations) shall be located at all points of egress including all exit doors on every floor and/or building level.

- e. Water flow detection devices shall be connected to the protected premises fire alarm system to specifically activate the notification appliances upon water flow.
- f. Fire suppression system activation alarms shall be connected to the protected premises fire alarm system to specifically activate the notification appliances upon system activation. This includes but is not limited to wet chemical, CO2, clean agent, water mist and dry chemical systems.
- g. Fire control and/or suppression systems supervisory condition indicators shall be connected to and monitored by the protected premise fire alarm system. This specifically includes but is not limited to: valve supervisory switches (tamper switches), low air switches, low water switches, low temperature switches, fire pump condition indicators and/or any other situation or condition deemed necessary by the AHJ.
- h. Fire alarm systems shall be addressable and capable of indicating the status of all specific components connected to the system.
- i. All fire alarm systems shall be monitored by a service acceptable to the AHJ.
- j. Fire alarm annunciators shall be installed in all protected premises. The number and locations of the fire alarm annunciators installed shall be acceptable to the AHJ.
- k. As determined by the AHJ, any additional notification and/or initiation appliances/devices may be required due to size, occupancy hazards, building construction, and/or occupancy use.

Verona

Sec. 5-5-20 - Automated Fire Sprinkler System Required for Certain Buildings.

(a) Requirement. Approved automatic fire sprinkler equipment or automatic fire extinguishing systems shall be installed and maintained for all construction covered by this Chapter in Section 5-5-9.

(c) Installation Required. The requirement for automatic sprinkler systems will be determined by reference to the UBC Wisconsin Enrolled Commercial Building Code, current addition, with the following exception: Firewalls and rated partitions will not be allowed in lieu of automatic sprinkler systems. The total square footage of each story will be used to determine the requirements for an automatic sprinkler system.

(d) Application to Existing Buildings. Where the Fire Chief and/or the Building Inspector finds that existing buildings, which, in whole or in part for the purposes set forth in Section 5-5-9, constitute a fire hazard to its occupants or adjoining property, the Fire Chief and/or the Building Inspector may require the installation of automatic sprinkler systems or automatic fire extinguishing systems as provided under this Article.

(e) Type of System and Approval of Plans.

(1) Automatic sprinkler equipment shall be installed and connected to an adequate water supply. Sprinkler heads, valves and auxiliary equipment of standard types shall be determined by the authority having jurisdiction in effect at the date of installation.

(2) All automatic sprinkler systems will be installed as to audibly alert persons occupying buildings.

(f) Exemptions.

(1) Safe deposit or other vaults.

(2) Rooms or buildings devoted to the manufacture or storage of aluminum powder, calcium carbide, calcium phosphide, metallic sodium or potassium, quick lime, magnesium powder, sodium peroxide or like materials where the application of water may cause or increase combustion.

(3) Any other locations where the installation of sprinklers may increase the occupational hazard as determined by the authority having jurisdiction.

Waukesha

16.01 Purpose of Code

(2) SUPPLEMENT. The provisions of this chapter shall be deemed to supplement any and all laws of the State and orders of the State Department of Safety and Professional Services relating to buildings.

(6) STATE CIDES ADOPTED.

(a) Wisconsin Commercial Building Code, the Wisconsin Commercial Building Code, Wis. Admin. Code SPS chs. 360 to 366, and all amendments adopted thereto, shall apply to all public buildings and places of employment and is hereby adopted by reference as if fully set forth herein. Where there is a conflict between a general requirement and a specific requirement, the specific requirement shall be applicable. In any specific case, different sections of this code specify different materials, methods of construction or other requirements, the most restrictive shall govern.

16.16 Reroofing. A new roof covering may be applied on top of an existing roof covering. No more than 2 layers of roof covering will be allowed. If additional layers of roofing material are requested, calculations shall be submitted and a permit required.

17.10 Licensing of Rooming Houses

(2) CONDITIONS-FACILITIES.

(c) (Am. #24-99) In the interest of protecting the health, welfare, and safety of the citizens of the City of Waukesha, rooming houses must adhere to the following requirements:

1. (Am. #1-13) All rooming houses shall meet the installation and fire alarm detection system requirements set forth in Section 907 of the International Building Code as adopted by SPS §362 of the Wisconsin Administrative Code. All rooming houses shall have hard wired smoke detectors in all rooms. All rooming houses shall have a monitored fire alarm system that includes interconnected smoke detectors that meet the requirements of International Fire Code Section 907 and National Fire Protection Association model code NFPA 72 in all common areas. All rooming houses shall comply with the automatic smoke detection system requirements set forth in IFC §907.2.8.2. All rooming houses in existence prior to the adoption of this amendment shall have until May 1, 2001, to come into compliance with this section.

2. (Am. #1-13) All rooming houses must possess fire extinguishers which meet the requirements of IFC Section 906 and NFPA 10. Fire extinguishers shall be located on each floor level and be situated not more than seventy-five (75) feet apart. At least a 2A20BC rated fire extinguisher shall be provided in any and all permanently installed cooking areas.

21.01 Adoption of eCodes

(1) (Am. #2-00) (Am. #18-08) (Am. #1 -13) The following codes of the National Fire Protection Association (NFP A) and any amendments thereto are hereby adopted and made a part of this code as if fully set forth herein: 10, 11, 11A, 12, 12A, 13, 13R, 14,16, 17, 17A, 18, 20, 22, 24, 25, 30, 30A, 30B, 31, 32, 33, 34, 35, 36, 40, 51, 51A, 51B, 52, 55, 58, 59A, 61, 69, 72, 75, 80, 82, 85, 86, 92, 96, 99, 110, 111, 160, 211, 241, 326, 385, 407, 409, 484, 495 , 498, 505 , 654, 655, 664, 750, 1123, 1124, 1125, 1126, 1127,and 2001.

(2) (Am. #49-02) (Am. #18-08) (Am. #1 -13) The following provisions of the Wisconsin Administrative Code and any amendments thereto are hereby adopted and made a part of this chapter as if fully set forth herein: SPS Chapters 305, 307, 308, 310, 314, 316, 318, 328, 332, 334, 340, 341, 343 and 360-366; ATCP Chapter 93. Buildings for which plans were submitted before July 1, 2002, must further comply with COMM Chapters 50-59 and 66 and said provisions of the Wisconsin Administrative Code are hereby adopted and made part of this chapter as if fully set foIt h herein.

(3) (Am. #49-02) (Am. #9-04) (Am. #1 -13) The following provisions of the International Code Council International Fire Code and any amendments thereto are hereby adopted and made a part of this chapter as if fully set forth herein: IFC Chapters 2-33, 35-45. IFC Chapter 34 is hereby adopted and made a part of this chapter as if fully set forth herein. Where IFC Chapter 34 and ATCP Chapter 93 set conflicting requirements, types of materials, or methods of construction, the most restrictive rule shall govern.

21.07 Installation of Automatic Fire Sprinkler Systems

(2) NEW OCCUPANCIES AND LOCATIONS. Automatic fire sprinkler systems shall be installed and maintained in operable condition in the following new occupancies and locations:

(a) Within all new factories, workshops, office buildings, mercantile establishments, warehouses, passenger terminals, exhibition buildings, new motor vehicle repair garages, motor vehicle storage garages, body shops, and places of public assembly with less than a 100 person occupant load where:

2. (Am. #49-02) All buildings 6,000 square feet or more in total area or where required by Wisconsin Administrative Code SPS Chapters 361-366; or

3. The building has three (3) interior stories or more in height regardless of area.

4. in any basement or subbasement in a new motor vehicle repair garage, motor vehicle storage garage or body shop if a vehicle can be parked therein

(b) Within the following residential occupancies:

1. (Am. #1-13) In structures having the occupancy classification residential R-1 and R-2 under section 202 of the International Fire Code, the buildings shall be protected by an automatic sprinkler system installed and maintained in accordance with IFC §903.2.8 and 901.6.

2. (Am. #18-08) (Am. #1-13) In structures having the occupancy classification residential R-3 and R-4 under section 202 of the International Fire Code, the buildings shall be protected by an automatic sprinkler system installed and maintained in accordance with Wis. Admin. Code SPS §362.0903.

(c) In new theaters and buildings of public assembly over 100 person occupancy, new health care facilities including hospitals, nursing homes, convalescent and group care centers, new detention and correctional facilities, day care facilities licensed to accommodate public or private day care for twenty (20) or more children, automatic sprinklers shall be installed throughout such buildings regardless of size or type of construction.

(d) New schools, colleges and universities.

2. (Am. #18-08) Where the building is of Types 3-5 of nonfire resistive construction, throughout the building regardless of size.

(e) Airport Buildings. (Am. #49-02) If the plans for the building were submitted before July 1, 2002, control towers; terminal buildings; buildings that are primarily used for repair or servicing of aircraft; buildings that have attached area used for storage, office manufacturing dining or other similar activities; any hangar with an area over 15,000 square feet which is constructed after the date of adoption of this ordinance. This subsection shall not apply to buildings the plans for which were submitted on or after July 1, 2002.

(f) High hazard occupancy: Any new building which by reason of its construction, or combustible operations is deemed a severe life or property hazard by the Fire Chief or his designate. This includes, but shall not be limited to the following operations:

1. The manufacturing, storage, handling, spraying of paint and varnish or other related operations.
2. Storage of combustible and flammable gases including but not limited to acetylene, hydrogen, liquid propane, in excess of 2,000 cubic feet.
3. Manufacturing and storage of explosives and pyrotechnics.
4. Commercial building basements over 2,500 square feet with combustible materials contained or stored within and not subject to Wisconsin Administrative Code.

(g) Exceptions. Automatic fire sprinkler systems are not required in the following:

1. Rooms or buildings used for the manufacture or storage of aluminum powder, calcium carbide, calcium phosphate, metallic sodium or potassium, quick lime, magnesium powder, sodium peroxide or like materials where the application of water may cause or increase combustion.
2. The portion of the building or foundry used to melt and pour metal or glass into a mold or cast and portions of buildings used for heat treating operations.
3. (Am. #18-08) In any building where the Fire Chief determines that the use of water as a fire extinguishing agent would increase the hazard. However, an automatic fire extinguishing system as defined in IFC section 902.1 using an extinguishing agent other than water, and/or an automatic detection system shall be installed.

(3) EXISTING BUILDINGS. All existing public buildings or places of employment, additions thereto, and all use changes shall conform to this Code as follows:

(a) The entire building if more than 50 percent of the cumulative square footage of the building, place of employment or addition thereto is remodeled, after the adoption of the City's Automatic

Fire Sprinkler System ordinance on August 7, 1996, in one or more increments over the life of the building.

(b) An addition, regardless of size or occupancy, made to a building with an existing automatic fire sprinkler system.

(c) If an existing building which was built before August 7, 1996, is divided by a four hour division fire wall as defined in COMM 51.02(B) the division shall result in two separate buildings. Only one such fire division wall will be allowed per building.

(5) INSTALLATION.

(a) Approved automatic fire sprinkler systems shall be installed in accordance with the standards of the current edition of N.F.P.A. relating to the installation of sprinkler systems and other applicable standards of SPS, and the Municipal Code of the City of Waukesha.

(b) Compressors for Dry Pipe Systems are required to be wired directly into the building's electrical power system.

(c) (Am. #59-01) All compressors for Dry Pipe Systems will have low limit air switches and alarms separate from any other alarms located on the premise.

(e) (Am. #39-99) All fire alarm systems shall be interconnected. One horn strobe alarm shall be provided on the outside of the building by the F.D.C.

(8) FIRE DEPARTMENT HOSE CONNECTIONS. Every automatic sprinkler system installed in new or existing buildings shall be equipped with at least one Fire Department hose connection at a location approved by the Fire Prevention Bureau and meeting SPS standards.

Wauwatosa

Chapter 14.20 - FIRE PREVENTION CODE AMENDED—AUTOMATIC SPRINKLER PROTECTION

14.20.030 - Installation required.

Approved automatic fire sprinkler equipment shall be installed and maintained as follows:

B. Garages.

4. Garages used as passenger terminals.

G. Hospitals.

1. Fire-resistive buildings:

a. Throughout all buildings;

2. Non-fire-resistive buildings:

a. Throughout all buildings.

H. Nursing, Convalescent, Institutional and Penal Occupancies.

1. Throughout all buildings.

I. Schools, Colleges and Universities.

1. Throughout all buildings.

K. Hazardous Properties.

1. Throughout every building which by reason of its construction or highly combustible occupancy involves a severe life hazard to its occupants or adjoining property or in the judgment of the authority having jurisdiction, constitutes a fire menace;
2. Sample occupancies which are considered highly combustible:
 - a. Chemical works or storage,
 - b. Explosive or pyrotechnic manufacturing,
 - c. Linseed oil mills, storage or manufacturing,
 - d. Linoleum and oil cloth manufacturing,
 - e. Oil refineries or storage facilities,
 - f. Paint shops,
 - g. Pyroxylin plastic manufacturing or processing,
 - h. Shade cloth manufacturing,
 - i. Solvent extracting,
 - j. Varnish or paint manufacturing,
 - k. All occupancy involving processing, mixing, storage and/or dispensing volatile liquids and/or toxic gases.

L. Other Properties.

1. All subbasements, required throughout;

Chapter 14.22 - FIRE PREVENTION CODE AMENDED—FIRE PROTECTION SYSTEMS FOR EXISTING BUILDINGS

14.22.020 - Application.

A change to a more hazardous use of an existing building or structure by present or future occupants will cause the building or structure to comply with the requirements of this chapter.

14.22.040 - Installation required.

Approved fire protection systems shall be installed as follows:

A. Flammable and combustible liquids:

1. Fire areas in buildings or portions of a building in which the storage, use and/or sale of flammable and combustible liquids is caused to exist in excess of ten gallons and does not exceed in quantity two hundred forty gallons, shall be protected by an approved automatic smoke- detection system. Same when alarmed shall cause audible alarms to sound throughout the building. Heat detectors may be substituted in areas of false alarm potential.

2. Fire areas in buildings or portions thereof used for the storage and sale of flammable and combustible liquids in excess of two hundred forty gallons shall be protected by an approved automatic suppression system.

B. Combustible materials:

1. Fire areas in buildings or portions of buildings in which the storage, sale, manufacturing or use of combustible solids is caused to exist with an increase in fire load of twenty-five percent shall be protected by an approved smoke-detection system. Same when alarmed shall cause audible alarms to sound throughout the building. Heat detectors may be substituted in areas of false alarm potential.

2. Fire areas in buildings or portions of buildings in which the storage, sale, manufacturing or use of combustible solids is caused to exist with an increase in fire load of fifty percent shall be protected by an approved suppression system. Same when alarm shall cause audible alarms to sound throughout the building. Heat detectors may be substituted in areas of false alarm potential.

C. Flammable gases:

1. Fire areas of buildings or portions of buildings in which flammable gases are caused to exist and are sold shall be protected by an approved automatic detection system. Same when alarmed shall cause audible alarms to sound throughout the building. Heat detectors may be substituted in areas of false alarm potential.

2. Fire areas of buildings or portions of buildings in which there is caused to exist flammable gases for storage or use shall be protected by an approved automatic suppression system.

D. Hazardous material:

1. Fire areas of buildings or portions of buildings in which there is caused to exist hazardous materials as listed in the Emergency Handling of Hazardous Materials in Surface Transportation, published by the Bureau of Explosives, Association of American Railroads shall be protected by an approved automatic suppression system and/or detection systems as may be approved by the fire prevention bureau.

West Allis

5.10. Fire Prevention Code.

(8) Fire Hydrant Requirements on Private Property .

(b) Where Required.

2. Fire Department standpipes.

a. Class 3 standpipes will be installed in any building, hereafter erected or structurally altered to increase the floor area by 50% or more, if three stories or more, and/or new buildings, which, because of their occupancy, create special fire fighting problems. All standpipes will be installed per National Fire Protection Association (NFPA) Codes

and Standards 14. The number and location will be determined by the Chief of the Fire Department.

b. The installation of a sprinkler system will not supersede the requirements for the installation of Fire Department standpipes.

(15) Automatic Closing Devices.

(a) Where Installed.

1. Except on single and two family dwellings, there shall be an automatic closing device on all fire and smoke doors, except doors leading directly outside in all buildings, regardless of size.
2. On all fire shutters and vents.
3. Wired into fire alarm system where fire alarm system is required.

(b) How Installed. Per National Fire Protection Association standards and West Allis Fire Department requirements.

(16) Automatic Fire Sprinklers.

(b) Where Installed. Approved automatic fire sprinkler equipment shall be installed and maintained in all buildings, including the following: multi-family, commercial, office, industrial, institutional, governmental buildings and public buildings, in accordance with this paragraph.

2. Approved automatic fire sprinkler equipment shall be installed and maintained in the following accessory buildings and special principal building and building areas:

a. Garages as follows:

- (i) Garages within, attached to, above or below other occupancies.
- (ii) Garages used as passenger terminals.

e. Hospitals. Throughout all buildings regardless of construction type.

f. Nursing, Convalescent, Old Age and Other Similar Institutional Buildings. Throughout all nursing, convalescent, old age and other institutional buildings regardless of size and construction type.

i. Day Care Centers. All new construction regardless of size shall be completely sprinklered in accordance with National Fire Protection Association 13.

(g) Additions. Remodeled Buildings and Change of Use. All existing public buildings or places of employment, and all additions shall conform to this section, as follows:

1. More than 50% remodeled or added. If more than 50% of the gross area of a building is remodeled and/or added, the entire building shall comply with the requirements of this section.
3. The percentage of a building remodeled or added from the date of passage of this Code shall be added together for each remodeling or addition to get the total percentages remodeled or added.

4. Any building with an existing sprinkler system, when making an addition, regardless of size or occupancy, will sprinkler the addition in accordance with National Fire Protection Association 13.
5. If the use of an existing building is changed to a new use, it shall comply with all aspects of this Code.

West Bend

5.200 GENERAL PROVISIONS

(2) SCOPE.

(b) Exempt Buildings. The following buildings and uses are not public places or places of employment and are not subject to the provisions of this code:

1. Single-family and two-family dwellings.
2. Buildings used exclusively for fanning as described in sec. 102.04(3), Stats.

(4) ADDITIONS TO, CHANGE OF USE OR REMODELED BUILDINGS.

Requirements for additions to, change of use or remodeling of buildings shall follow the requirements of the latest printed version of the International Building Code and/or International Existing Building Code.

5.202 INCORPORATION OF STANDARDS BY REFERENCE.

(1) CODES, STANDARDS AND REGULATIONS ADOPTED BY REFERENCE. In addition to other state and national codes, standards and regulations specifically adopted elsewhere in this Chapter, the following codes, standards and regulations are adopted by reference in their entirety. Any violation of the codes, standards or regulations adopted by reference constitutes a violation of this Code.

- (a) State of Wisconsin Fire Prevention Regulations, Ch. Comm. 14 of the Wisconsin Administrative Code, as updated and revised from time to time.
- (b) The most current printed version of the National Fire Protection Association Uniform Fire Code (NFPA 1) legislatively enacted by the State of Wisconsin.
- (c) The most current printed version of the International Building Code as adopted by the State of Wisconsin.
- (d) The most current printed version of the International Existing Building Code as adopted by the State of Wisconsin.

(2) CONFLICTS. In cases of conflict between this Code and the codes, standards and regulations adopted by reference, the most restrictive provision shall govern.

(3) GOOD OR SAFE PRACTICES. Wherever in this subchapter reference is made to nationally recognized good or safe practice, the intent is that the practice to be followed shall be reasonable and safe, as deemed by the Fire Chief.

- (a) The Fire Chief, on request of any person affected by any decision as to what constitutes nationally recognized good or safe practice, shall identify the specific provisions of the Fire Prevention Code or other standard publications on which he bases his decision. Any person

aggrieved by such decision may appeal to the Fire Prevention Board in accordance with sec. 5.120 of this Code.

(b) Any publications used to determine nationally recognized good or safe practice shall be broadly construed to determine intent, but no provisions contrary to this Code or any of the codes, standards or regulations adopted by reference shall be used as a reference.

(4) The Fire Chief shall maintain in his office, available for public inspection and use during regular office hours, a complete set of all codes, standards and regulations adopted as part of this Chapter and all other publications which he may use as the basis for decisions as to what is nationally recognized good or safe practice.

5.206 FIRE SPRINKLER SYSTEMS.

(3) ADDITIONAL SYSTEM REQUIREMENTS.

(a) System Drain. The fire sprinkler system shall have a drain piped to the outside of the building.

(b) Inspectors Test Valve. The fire sprinkler system shall have an inspector's test valve piped so as to discharge water to the outside of the building.

(d) Monitoring. New fire sprinkler systems shall be monitored by an offsite central station monitoring service that is permitted to operate in the City of West Bend.

(e) Outside Notification. The fire sprinkler system shall have a horn/strobe located above the Fire Department connection (FDC), as defined in NFPA 13.

(f) FDC Location. The location of the FDC shall be no more than 150 feet travel distance to a water supply. The FDC shall be located on the front of the building or another location on the building acceptable to the Fire Chief or Bureau.

5.207 FIRE ALARM SYSTEMS.

(1) WHERE REQUIRED.

(b) The owner of any building being renovated that has an existing fire alarm system required by state or local code shall bring the entire building's fire alarm system into current code compliance in accordance with the International Existing Building Code, as adopted herein.

(c) The owner of any building who replaces the existing fire alarm panel shall also update or add fire alarm detection and notification devices for the entire building in accordance with the requirements for new fire alarm system installations.

(d) The owner of any existing building that was not required to have a fire alarm system installed at the time of construction because of the intended use of the building, is required to install a fire alarm system if the building's use changes resulting in a new intended use hazard classification under the NFPA that requires installation of a fire alarm system.

(e) As determined by the Fire Chief or Fire Inspectors.

5.211 OTHER REQUIRED FIRE PROTECTION SYSTEMS.

(3) MONITORING. All other required fire protection systems that are required to be monitored under any provision of this Chapter or the applicable NFPA code section, shall be monitored at all times by a fire alarm monitoring company permitted to do so under sec. 5.208 of this Code.

5.212 STANDPIPES.

(1) WHERE REQUIRED.

(a) Standpipe systems are required in accordance with the current regulations adopted by the State of Wisconsin Department of Commerce as found in the Wisconsin Administrative Code, as amended or renumbered from time to time, or as required by sec. 5.204 of this Code.

(b) The owner of any building being renovated that has an existing standpipe system required by state or local code shall bring the standpipe system into current code compliance in accordance with the International Existing Building Code, as adopted herein.

(c) The owner of any building that changes the occupancy use of that building shall upgrade the existing standpipe system if necessary to comply with the current hazard group requirements based upon the occupancy type as defined in the NFPA 14 hazard classifications.

(d) The owner of any existing building that was not required to have a standpipe system installed at the time of construction because of the intended use of the building, is required to install a standpipe system if the building's use changes resulting in a new intended use hazard classification under the NFPA that requires installation of a standpipe system.

(3) ADDITIONAL SYSTEM REQUIREMENTS.

(a) The location of standpipe connections shall be in accordance with NFPA 14, shall be unobstructed and shall be acceptable to the Fire Department so that all portions of the building can be reached by a nozzle attached to 150 feet of fire hose.

(b) When required by the Fire Department, an approved standpipe shall be installed as construction progresses on a building or structure such that the standpipe is available for Fire Department use in the top most floors constructed. Temporary standpipes may be provided in place of permanent standpipes during the period of construction if approved by the Fire Department.

(c) The Fire Department connections for the standpipe shall be approved by the Fire Department and shall be placed on a separate riser from the building's fire sprinkler system unless a different configuration is approved by the Fire Chief or the Bureau.

(d) Hose connection types and locations shall be approved by the Fire Department prior to construction.

West Milwaukee

Sec. 42-1. - General provisions.

(2) *Applications.*

(b) The provisions of this Code shall apply equally to new and existing conditions, except that existing conditions not in strict compliance with the terms of this subsection shall be permitted to continue where the exceptions do not constitute a distinct hazard to life or adjoining property or have been superseded by this Code.

(3) Additions to, change of use or remodeled buildings.

(a) If 50 percent or more of the total floor area of a building is remodeled and/or added, the entire building shall be brought into compliance with the requirements of this Code.

(d) All percentages of additions or remodeling shall be cumulative as applied to (a), (b) and (c) above.

(e) If the use of and/or contents of any existing building is changed and becomes more hazardous as determined by the authority having jurisdiction (AHJ), the building shall be brought into compliance with this Code.

(f) Those portions, elements, systems or components of existing buildings and structures to be altered or modified on or after the effective date of the rules under this Code and where the alteration, modification or the addition affects a building element or component relating to subject matters regulated by this Code, shall be designed, constructed and maintained in accordance with the applicable rules of this Code as the rules exist on one of the following:

1. The date plans of the alteration or modification are conditionally approved by the AHJ.
2. The date the local building permit is issued.
3. The date the replacement is initiated, where section 42-1(3)(f)1. and 2. do not apply.

Sec. 42-3. - Adoption of Wisconsin Department of Commerce Codes.

(1) The most current legislatively enacted versions by the state, on the effective date of this Code shall apply.

- (a) COMM 5 Licenses, Certification and Registration
- (b) COMM 7 Explosive Materials
- (c) COMM 9 Manufacture of Fireworks
- (d) COMM 10 Flammable and Combustible Liquids
- (e) COMM 14 Fire Prevention
- (f) COMM 16 Electrical
- (g) COMM 18 Elevator Code
- (h) COMM 28 Smoke Detectors
- (i) COMM 40 Gas Systems
- (j) COMM 45 Mechanical, Refrigeration
- (k) COMM 61—65 Enrolled Commercial Building Code
- (l) COMM 70 Historic Buildings
- (m) COMM 75—79 Existing Buildings
- (n) COMM 95—98 Manufactured Homes

(2) Any violation of the incorporated provisions constitutes a violation of this Code.

(3) In cases of conflict between local and state Codes, the most restrictive provisions shall govern.

Sec. 42-4. - Adoption of International Code Council Inc. Codes.

The latest I.C.C. publication(s) listed below and published on or before the effective date of this Code are adopted by reference, enforced and incorporated into this Code as if fully set forth herein:

- (1) International Fire Code (applies only to sections specifically referenced in this Code) 2003 edition.

Sec. 42-5. - Adoption of Wisconsin and NFPA codes and standards

All orders, rules and regulations established and propagated by the department of safety and professional services, or its successor administrative agency, as are set forth in the Wisconsin Administrative Code as from time to time amended, are hereby adopted. The most current legislatively enacted versions of those documents are adopted and will be enforced. NFPA 1, Fire Code® and NFPA 101, The Life Safety Code® are hereby adopted in their entirety as part of this chapter and serve as the fire prevention and construction codes for the Village of West Milwaukee. The most current available printed edition of the NFPA Codes and Standards are adopted and will be enforced. In the event of a conflict between any of the provisions of this Code with state codes and/or NFPA Codes and Standards and the more restrictive shall control and govern.

Sec. 42-8. - Variances.

- (1) The AHJ shall have the power to modify any of the provisions of this Code upon application in writing by the owner or occupant, or a duly sworn authorized agent, when there are practical difficulties in the way of carrying out the strict letter of the Code, provided that the spirit of the Code shall be observed, public safety secured, and substantial justice done.

Sec. 42-12. - Automatic fire sprinkler protection.

(2) Installation required. An automatic fire sprinkler system shall be installed in all structures where the floor area exceeds the thresholds established in Table 42-12(b) of the specific occupancy involved. For the purpose of determining square footage as it relates to the sprinkling of a building, firewalls shall not be considered area dividers unless the firewall is built in compliance with Section 705 of the Commercial Building Code (CBC)

Table 42-12(b)

Occupancy

Type	Type I	Type II	Type III	Type IV	Type V
E*	All	All	All	All	All
F2	5,000 SF	5,000 SF	3,000 SF	3,000SF	3,000 SF
I-2	All	All	All	All	All
I-3	All	All	All	All	All
I-4	All	All	All	All	All
R-4	All	All	All	All	All
U	5,000 SF	5,000 SF	3,000 SF	3,000 SF	3,000 SF

*Excludes single family home day cares.

- (3) In addition an automatic sprinkler system shall be installed in all:

- (a) Parking structures above and below ground with ceilings.
 - (b) CBRF's (community based residential facilities).
 - (c) Adult family homes.
 - (d) Concealed spaces to include: above drop ceilings, crawl spaces, hidden spaces, plenum, stairways, basements, closets nine square feet or larger, attics, baths and kitchens.
 - (e) Newly constructed buildings including hotel, institutional, hospitals, health care, daycare, dormitories, dry cleaning, passenger terminal, manufacturing, storage/shipping facility and hazardous occupancy not stated above, regardless of size.
 - (f) Throughout every building, new or existing, which by reason of its construction or combustible occupancy involves a life hazard to its occupants or in the judgment of the AHJ constitutes a fire menace.
- (4) Mini warehouses and unattached multifamily parking garages. Throughout all buildings provided that they contain:
- (a) Five thousand square feet or more in area on any floor or exceeding two stories.
 - (b) Any portion that the floor is below grade level.
- (6) Dormitories, fraternities and sorority houses. Throughout all buildings.
- (7) When a sprinkler system is required by this chapter but not the Wisconsin Department of Commerce, at a structure that is currently serviced by a municipal water source:
- (b) Within 90 days after a municipal water system becomes available, the sprinkler system shall be connected to the municipal water supply.
- (8) All automatic fire sprinkler systems shall:
- (a) Be monitored in accordance with NFPA 72.
 - (b) Have sprinkler control rooms located with adequate access for fire department, sprinkler maintenance and inspection personnel and shall not be located within private dwellings with the exception of NFPA 13D systems.
 - (c) Have direct access from the exterior to the sprinkler control valve as determined by the AHJ.
 - (e) Have a bell (minimum ten inch) and strobe located above the FDC in accordance to NFPA 13.
 - (f) The FDC must be at least 40 feet from all gas meters, electrical meters and transformers.
 - (g) Be designed for the hazard being protected or as specifically specified in this Code and/or as directed by the AHJ.
 - (h) All automatic fire sprinkler systems hydraulic designs are to be based on 90 percent available water supply (ten percent safety margin shall be maintained). All sprinkler systems designed shall be based on the most current approved water flow test conducted in accordance with NFPA 291.
- (10) Application to existing buildings.
- (a) Where the AHJ finds that an existing building, because of current occupancy or a change in occupancy constitutes a hazard to its occupants or adjoining property, the AHJ may order

compliance with the provisions of this section. A hazard shall be determined by the existence of one or more of the following conditions:

1. Any building which by reason of its construction or highly combustible occupancy involves a hazard to its occupants or, in the judgment of the AHJ, constitutes a fire menace, e.g., paint shop and other occupancies involving processing, mixing, storing, and dispensing of volatile liquids or solids.
2. Non-fire-resistive characteristics of a structure.
3. Accumulation of flammable or combustible materials.
4. Lack of accessibility to the premises for fire-fighting equipment.
5. Substantial number of fire calls or complaints on the premises.
6. Traffic patterns for pedestrian ingress and egress which require protection under this section.
7. Insufficient ventilation system.
8. Lack of an internal communication system, or due to the size or type of building making regular fire department radio communication inoperable, the building owner is required to install a repeater system or something comparable to assist radio communications.
9. Number, characteristics and movement of employees which require protection under this section.

(b) Installation of an automatic sprinkler system must be started within one year from the service of such orders and shall be completed within 180 days after construction has started.

(11) Exemptions. Any location where the installation of sprinklers may cause or increase an occupational hazard as determined by any governmental authority having jurisdiction over such location or occupation.

Sec. 42-13. - Automatic fire protection for cooking areas.

(2) Installation requirements.

(b) The system shall be provided with automatic fuel shut-off.

(c) A class K fire extinguisher shall be installed per NFPA 10

(d) Alarms shall be connected to the fire alarm system per NFPA 72.

(e) Cooking equipment used in processes producing smoke, or grease-laden vapors shall be equipped with an exhaust system that complies with all the equipment and performance requirements of NFPA 1 and NFPA 96, and all such equipment and performance shall be maintained per NFPA 96 during all periods of operation of the cooking equipment.

Sec. 42-14. - Miscellaneous construction provisions.

(4) *Fire alarm systems.*

(b) *Installation required.* A fire alarm system shall be installed in all structures where the floor area exceeds the thresholds established in Table 42-14(4)(b) of the specific occupancy involved.

Table 42-14(4)(b)

E*	All	All	All	All	All
I-2	All	All	All	All	All
I-3	All	All	All	All	All
I-4	All	All	All	All	All
M	5,000 SF	5,000 SF	3,000 SF	3,000 SF	3,000 SF
R-3	Multi-Family Statute applies				
R-4	All	All	All	All	All
S-1	3,000 SF	3,000 SF	3,000 SF	3,000 SF	3,000 SF
S-2	5,000 SF	5,000 SF	3,000 SF	3,000 SF	3,000 SF
U	5,000 SF	5,000 SF	3,000 SF	3,000 SF	3,000 SF

*Includes single family home daycares.

(c) *Minimum system requirements.* The following minimum system requirements shall be met when any occupancy type exceeds the limits in Table 42-14(4)(b). Minimum system requirements shall include:

1. Audible notification appliances shall be installed throughout protected premises.
2. Visible notification appliances shall be installed throughout protected premises.

Exceptions:

- a. Closets and/or other similar small storage rooms that do not exceed 50 square feet in floor area and are not normally occupied.
- b. Normally unoccupied crawl spaces.
- c. Normally unoccupied attic spaces.
- d. Any non-accessible area.
- e. Any area the AHJ deems visible notification appliances are not required.

4. Manual initiating devices (pull stations) shall be located at all points of egress including all exit doors on every floor and/or building level.

Exceptions: Manual initiating devices are not required in buildings that have complete automatic fire sprinkler systems installed in accordance with NFPA 13 unless required by the AHJ.

5. Water flow detection devices shall be connected to the protected premises fire alarm system to specifically activate the notification appliances upon water flow.
6. Fire suppression system activation alarms shall be connected to the protected premises fire alarm system to specifically activate the notification appliances upon system activation. This includes but is not limited to wet chemical, CO₂, clean agent, water mist and dry chemical systems.
7. Fire control and/or suppression systems supervisory condition indicators shall be connected to and monitored by the protected premise fire alarm system. This specifically includes but is not limited to: Valve supervisory switches (tamper switches), low air switches, low water switches, low temperature switches, fire pump condition indicators and/or any other situation or condition deem necessary by the AHJ.

8. Fire alarm systems shall be addressable and capable of indicating the status of all specific components connected to the system.

9. All fire alarm systems shall be monitored by a service acceptable to the AHJ.

10. Fire alarm annunciators shall be installed in all protected premises. The number and locations of the fire alarm annunciators installed shall be acceptable to the AHJ.

11. As determined by the AHJ, any additional notification and/or initiation appliances/devices may be required due to size, occupancy hazards, building construction, and/or occupancy use.

(f) *Special requirements.* On all buildings over four stories in height a fire command center for fire department operations shall be provided. The fire command center shall comply with NFPA 72 and shall contain the features required in the International Fire Code and NFPA 1, 13.7.2.27.2.2.

1. Two-way telephone communication service shall be provided for the fire department use. This system shall be in accordance with NFPA 72. The communications system shall operate between the central control station and every elevator car, every elevator lobby, and each floor level of exit stairs.

2. The requirements of NFPA I, 13.7.2.27.2.2(A) shall not apply where the fire department radio system is approved as an equivalent system. [NFPA 101, 11.8.3.2.]

(i) *Fire alarm control panels.* Shall display the status of the system components and be installed in a location acceptable to the AHJ. Adequate access for fire department, alarm maintenance, and inspection personnel shall be maintained. Fire alarm control panels shall not be located within private dwellings with the exception of one and two family dwellings.

(9) *Standpipes.* Fire department standpipes shall be provided in all new structures over two stories in height and in accordance with this section. The installation of standpipes shall be in accordance with this section and NFPA 14.

2. The location of standpipe connections shall be accessible and shall be located so that all portions of the building are within 30 feet of a nozzle attached to 100 feet of hose.

3. When required by the AHJ, an approved standpipe shall be installed as construction progresses to make them available for fire department use in the top most floors constructed. Temporary standpipes shall be provided in place of permanent standpipes when required, during the period of construction on buildings over three stories in height.

4. The fire department connections for the standpipe shall be approved by the AHJ.

5. The fire department connections shall be located at least 40 feet from all electrical transformers, gas meters, or propane storage.

6. Temporary standpipes are required on buildings over three stories in height.

Sec. 42-15. - Miscellaneous use provisions.

(4) *High-piled combustible storage.*

(f) General fire protection and life-safety features shall be in accordance with section 2306 of the International Fire Code. Exception: Compliance with section 2306.7 is not required by this Code.

Note: this section may be required by the State of Wisconsin.

- (g) Solid piled and shelf storage shall be in accordance with section 2307 of the International Fire Code.
- (h) Rack storage shall be in accordance with section 2308 of the International Fire Code.
- (i) Automated storage shall be in accordance with section 2309 of the International Fire Code.
- (j) Specialty storage shall be in accordance with section 2310 of the International Fire Code.

Whitefish Bay

4.11 AUTOMATIC FIRE SPRINKLER SYSTEMS

1. AUTOMATIC FIRE SPRINKLER SYSTEM REQUIRED FOR CERTAIN BUILDINGS

- (a) An approved Automatic Fire Sprinkler system shall be installed throughout and maintained in operable condition in all new buildings regardless of size, construction, height, fire division wall separations and occupancy, except as provided in Section 4.11 (b).
- (b) Exceptions. Automatic fire sprinkler systems shall not be required in:
 - (i) One and two-family dwellings
 - (ii) Any other locations where the installation of sprinklers may increase the occupational hazard as determined by the Fire Chief.
 - (iii) The Fire Department is authorized to modify any of the provisions of this code upon application by the owner, lessee, or a duly authorized representative where there are practical difficulties in the way of carrying out the provisions of the code, provided that the intent of the code shall be complied with, public safety secured, and substantial justice done.

2. DESIGN AND INSTALLATION

- (a) The design and installation of any automatic fire sprinkler system shall be completed in accordance with NFPA 13-- Standard for Installation of Sprinkler Systems and other applicable standards of NFPA.
- (b) Additional design requirements:
 - (1) System Drain: The system shall have a drain piped to the outside of the building or to a drain suitable to handle the required flows.
 - (2) Inspector's Test Valve: The system shall have an inspector's test valve piped so as to discharge to the outside of the building, or to a drain suitable to handle the required flows.
 - (3) Alarm Bells or Horns: Alarms, bells or horns shall be installed on all systems. Bells or horns shall be installed on the inside of the building, and shall be in each unit or tenant space. A Mechanical Water Gong alarm shall be installed on the outside of the building.
 - (4) Residential Occupancies: In multifamily residential buildings without a common interior area, the sprinkler system riser shall be located in a separate heated room with direct access to the outside of the building for use by the fire department.

3. MONITORING REQUIREMENTS

(a) New sprinkler systems installed under this chapter shall be monitored by an approved off-site central station monitoring service.

(b) The monitoring shall include water flow indication and tamper switches on all valves in the system. The system shall be tied into the building fire and smoke detection alarm system to signal to the occupants that water is flowing.

4. CONDITIONAL APPROVAL REQUIRED FOR INSTALLATION

No automatic sprinkler equipment shall be installed or altered in any building until plans have been submitted to and conditionally approved by the Building Inspector and the Fire Department. Two copies of the plans and the specifications shall be submitted.

5. INSTALLATION OF SPRINKLER SYSTEMS - INSPECTION SERVICES REQUIRED

(a) Installation of Sprinkler Systems: The installations of all sprinkler piping, heads, risers shall be inspected by the Fire Department before being covered.

(b) Installation of Underground Piping: The installation of underground piping shall be inspected by the Fire Department prior to being covered.

(c) The installer shall provide minimum three (3) working days advanced notice to the Fire Department prior to performance of final acceptance test.

6. FINAL APPROVAL, ACCEPTANCE TEST - AUTOMATIC SPRINKLER SYSTEM

(a) The sprinkler system shall have a hydrostatic test performed in the presence of a Fire Department inspector.

(b) The sprinkler system shall be tested by flows of the main drain and inspector's test. The acceptance test shall be conducted by the installer in the presence of a Fire Department inspector.

(c) The installer shall provide minimum three (3) working days advanced notice to the Fire Department prior to performance of final acceptance test.

7. AUTOMATIC SPRINKLER SYSTEM -- ANNUAL TEST REQUIREMENTS -- OWNER'S RESPONSIBILITY TO MAINTAIN AUTOMATIC SPRINKLER SYSTEM

(a) Maintenance - Automatic fire sprinkler systems shall be maintained for efficient service as specified within NFPA 13A -- Standard for the Care and Maintenance of Systems.

(b) A qualified sprinkler technician shall inspect and test the automatic sprinkler system at least annually. The provisions of NFPA 13A, Chapters 7-21, shall be used as the inspection criteria.

(c) A current test record shall be posted adjacent the sprinkler control valve.

8. MAINTENANCE OF EQUIPMENT

Any sprinkler system which has been installed pursuant to this section or in compliance with any other statute, ordinance or regulation, shall be maintained in operative condition at all time. It shall be unlawful for any owner or occupant to reduce the effectiveness of the protection so required; provided, however, that the owner or occupant may temporarily reduce or discontinue the protection where necessary to make tests, repairs, alterations or addition to the system or appliance. The Fire Chief shall be notified before any system is reduced or discontinued for such repair, alteration or addition and shall be notified promptly upon the system's restoration to service.

4.12 ALARM SYSTEMS (Fire and Smoke Detection)

2. WHERE REQUIRED

Smoke and heat detection systems shall be installed in all spaces in all new buildings regardless of size or construction except for one and two-family dwellings. The detection systems shall be in all spaces, including, but not limited to, hidden spaces (e.g. attics, crawl spaces, truss constructed areas), basements, store rooms, closets, occupied and unoccupied areas. One and two family dwellings shall have smoke detection systems as required by the Wisconsin Statutes and the Wisconsin Administrative Code. The Fire Department is authorized to modify any of the provisions of this code upon application by the owner, lessee, or a duly authorized representative where there are practical difficulties in the way of carrying out the provisions of the code, provided that the intent of the code shall be complied with, public safety secured, and substantial justice done.

4. INSTALLATION

(e) External Devices:

(i) The system shall utilize UL or FM listed fire alarm initiating devices (pull stations, smoke detectors, heat detectors, water flow switches, duct detectors, etc.) and UL or FM listed fire alarm indicating devices (horns, bells, visual lights, etc.). Smoke detectors shall possess a Light Emitting Diode (LED) lamp to indicate "ready" or "alarm" status.

(ii) Smoke Detectors (Photoelectric, Ionization) shall be installed approximately 30 feet on center, located on the ceiling or wall of the protected area. Smoke detection shall be provided but not limited to the following areas: basements, common hallways, stairwells, sleeping rooms and all other rooms over 50 square feet in size.

(iii) Heat detectors shall be installed approximately 50 feet on center, located on the ceiling of the protected area. Heat detection shall be provided but not limited to the following areas: furnace rooms, engine rooms, garages, hidden spaces and kitchens and all other rooms under 50 square feet in area. Heat detectors shall also be installed as a the Fire Chief to be unsuitable for smoke detector installation.

(iv) Horns/Bells:

(a) Alarm System Horns: Horns used as the audible alarm indicating appliance shall be 24 volt direct current (DC) horns of metal construction with a minimum sound pressure output of 87 db at 10 feet. Fire alarm horns shall be UL or FM listed for fire alarm use. Horns shall be adaptable for surface or semi-flush mounting and be suitable for use within combination audio- visual systems.

(b) Alarm System Bells: Bells used as the audible alarm indicating appliance shall be 24 volt DC bells of the vibrating or single stroke type with a minimum sound pressure output of 90 db at 10 feet. Bells shall be UL or FM listed for fire alarm use. Bells shall be suitable for surface or semi-flush mounting and be suitable for use within combination audio-visual systems.

(c) Visual Flashing Lamps: Visual indicating appliances shall be comprised of a strobe-type flashtube and be entirely solid state. These devices shall be UL or FM listed and be capable of either ceiling or wall mounting. Visual units shall incorporate

a built-in reflector to improve lighting characteristics. Visual units shall be incorporated as part of the horn or bell assemble.

(d) Horns, Bells, or Visual Flashing Lamps shall be installed in each unit, living space or tenant space in the building.

5. SYSTEM OPERATION

(a) Alarm initiating devices shall be grouped in zones identified by Zone LED's on the control panel and at the remote annunciator.

(b) Actuation of an alarm initiating device shall:

(i) Cause the respective red zone alarm LED on the control panel to flash until the "acknowledge" switch is actuated at the control panel. Once acknowledged, the zone LED shall be constantly illuminated until the actuating device is restored to normal and the system is reset or equivalent operation.

(ii) The audible system indicating appliance shall sound through the entire facility until the system alarm acknowledge/silence switch is operated.

(iii) Visual indicating appliances shall flash until the acknowledge/silence switch is operated.

(iv) After the acknowledge switch is operated, subsequent activation of an initiating appliance shall cause the alarm bells or horns to resound, and the visual indicating appliances to flash.

(c) Each alarm circuit and indicating appliance circuit shall be electrically supervised. Any disarrangement of system wiring such as opens or grounds shall activate the audible and visual trouble indicators at the control panel. Actuation of the trouble silence switch shall silence the audible trouble indicator but the trouble LED shall remain lit. The trouble LED shall be non-canceling, except by an actual clearing of the trouble condition and restoring the trouble silence switch to normal.

(d) The alarm system shall provide for the selection of:

(i) Desired type of signal operation; alarm signal tempos, area selective codes, zone codes, general alarm codes, and alarm silence inhibit.

(ii) UL or FM approved alarm verification operation.

(iii) Water flow/Sprinkler supervisory operation on a distinct zone of the system.

(e) Upon actuation of smoke detector, the LED on the smoke detector shall remain constantly illuminated until the system is reset.