

ORDINANCE NO. 2009-04

**AN ORDINANCE REGULATING AND CODIFYING THE
AUTOMATIC FIRE SPRINKLER SYSTEM CODE
OF THE DEERFIELD-BANNOCKBURN FIRE PROTECTION DISTRICT**

WHEREAS, the Deerfield-Bannockburn Fire Protection District (the "District") is a fire protection district duly organized under the laws of the State of Illinois; and

WHEREAS, the Board of Trustees (the "Board") of the District has express power pursuant to 70 ILCS 705/11 to adopt and enforce fire prevention codes and standards parallel to national standards to promote fire prevention; and

WHEREAS, the Board has full power pursuant to 70 ILCS 705/6 to pass all necessary ordinances and rules and regulations for the proper management and conduct of the business of the Board for carrying into effect the objects for which the District was formed; and

WHEREAS, on December 13, 1984, the Board passed Ordinance No. 84-O-108 regulating the installation and use of automatic fire sprinkler systems within the District; and

WHEREAS, the Board has previously amended this Ordinance by passing Ordinance No. 2000-02 on July 13, 2000; and

WHEREAS, the Board determines that there again is a need to amend the District's Automatic Fire Sprinkler System Code; and

WHEREAS, the Board desires to codify its original ordinance along with all subsequent amendments to create a single unified ordinance; and

WHEREAS, the Board intends to incorporate all ordinances and parts of ordinances into this codified ordinance to the extent that they do not conflict or are inconsistent with this ordinance.

NOW, THEREFORE, BE IT ORDAINED by the Deerfield-Bannockburn Fire Protection District, Lake County, Illinois, as follows:

Section 1: PURPOSE

1-1 The purpose of this Ordinance is to regulate the design, installation and maintenance of automatic fire suppression and standpipe systems within the Deerfield-Bannockburn Fire Protection District.

Section 2: EXCEPTIONS

2-1 The only exception to this Ordinance shall be that existing structures, as of the adoption date of this ordinance, may continue as long as in the opinion of the Deerfield-Bannockburn Fire Protection District that they provide a reasonable degree of life safety from fire.

2-2 Where in the opinion of the Deerfield- Bannockburn Fire Protection District an automatic fire sprinkler system is required a period of time not to exceed one (1) year shall be given for compliance.

Section 3: GENERAL

3-1 Automatic fire sprinkler systems shall be designed, installed, and maintained in full operating condition in the following locations:

3-1.1 Assembly Use – In all buildings, structures or portions thereof of assembly use when more than five thousand (5,000) gross square feet in area or exceeding two (2) stories or thirty (30) feet in height.

3-1.2 Education Use – In all buildings or structures or portions thereof of educational use when:

- A.) More than ten thousand (10,000) gross square feet in area; or,
- B.) Two (2) stories or more in height.

3-1.3 Health Care Use – In all buildings or structures or portions thereof of health care use.

3-1.4 Penal Use – In all buildings or structures or portions thereof of penal use.

3-1.5 Residential Use – In all buildings or structures or portions thereof used for residential use other than one and two family dwellings

3-1.6 Mercantile Use – In all buildings or structures or portions thereof of mercantile use when:

- A.) More than five thousand (5,000) gross square feet in area total; or,
- B.) Over thirty (30) feet in height.

3-1.7 Business Use - In all buildings or structures or portions thereof of business use when:

- A.) More than five thousand (5,000) gross square feet in area total: or,
- B.) Two (2) stories or more in height; or,
- C.) Over thirty (30) feet in height.

3-1.8 Industrial Use – In all buildings or structures or portions thereof of industrial use when:

- A.) More than five thousand (5,000) gross square feet in area total; or
- B.) Over thirty (30) feet in height.

3-1.9 Storage Use – In all buildings or structures or portions thereof of storage use.

3-1.9-1 Any storage area exceeding ten thousand (10,000) gross square feet that is located below grade level or more than one (1) story above grade level is required to have an approved N.F.P.A. #14 Type I Standpipe System installed.

3-1.10 Parking Garage Use – In all buildings or structures or portions thereof of parking garage use either public or private when:

- A.) Located in any story below grade.
- B.) Located in any story that is enclosed.
- C.) Located in buildings where upper stories are designated for other uses.

3-1.10-1 Any level of any parking garage either public or private that is at or above grade and unenclosed shall be provided with a standpipe system in accordance with N.F.P.A. 14 Standard for the Installation of Standpipe and Hose Systems – 2007 Edition.

Section 4: INSTALLATION STANDARDS

4-1 At a minimum, all automatic sprinkler and/or standpipes, or their components of the system shall be designed, installed and maintained in accordance with the following National Fire Protection Association (N.F.P.A.) standards:

- A. N.F.P.A. # 13 — Installation of Sprinkler Systems, 2007 Edition.
- B. N.F.P.A. #13D – Sprinkler Systems in One and Two-Family Dwellings and Manufactured Homes, 2007 Edition.
- C. N.F.P.A. #13R – Sprinkler Systems in Residential Occupancies up to and including four stories in height, 2007 Edition.
- D. N.F.P.A. # 14 – Standpipe and Hose Systems, 2007 Edition.
- E. N.F.P.A. #15 – Water Spray Fixed Systems, 2007 Edition.
- F. N.F.P.A. #20 – Installation of Stationary Pumps, 2007 Edition.
- G. N.F.P.A. #25 – Water Based Fire Protection Systems, 2008 Edition.

4-2 When required, an approved and alarmed supervised indicating control valve shall be provided at the point of connection to the riser on each floor level in all buildings. A separate control valve is also required for each individual dwelling unit located in either a mercantile or business use groups. Where the units share a common water supply and have individual entrances.

4-3 All new Tamper switches are required to be electronically monitored by an approved fire alarm system, which will transmit supervisory signals.

4-4 Double Detector check valves with meters shall be provided on all required automatic fire sprinkler systems.

4-5 All new fire department connections shall be located on the street side of the building within one hundred (100) feet of an accessible approved municipal fire hydrant in a location approved by the authority having jurisdiction.

4-5.1 All new and existing fire department connections shall be accessible at all times.

4-5.2 All new and existing fire department connections shall have a red strobe installed directly above the connection, visible from street-side of the building. This strobe shall be approved for exterior use and operate upon activation of the system water flow alarm.

4-6 Where fire pumps are required for a system, the pump test header shall be located outside of the building or the authority having jurisdiction shall determine structure and the exact location.

Section 5: CONTROL VALVES AND ZONING OF SYSTEM

5-1 All required automatic sprinkler and standpipe systems shall be zoned in accordance with the requirements of the authority having jurisdiction and shall include but shall not be limited to the following:

- A.) Each floor level and/or total tenant gross square footage of any building or structure shall constitute no less than one (1) zone.
- B.) A control valve shall be located within each zone.
- C.) All new sprinkler control valves shall be located no higher than six (6) feet above the finished floor grade.
- D.) Sprinklers protecting electrical rooms, high hazard and/or elevator rooms shall be designed with a separate control valve located outside these rooms.

5-2 In all multiple tenant occupancies provisions shall be made for exterior indication to identify the tenant space affected by a water flow.

Section 6: SUPERVISION

6-1 All buildings or areas required to have an automatic suppression system shall contain audible and visual devices installed in accordance with N.F.P.A. #72 Fire Alarm Standard. This fire alarm system shall be monitored in accordance with adopted fire alarm Ordinance No. 2009-05 the Fire District.

Exception: Residential occupancies protected in accordance with a N.F.P.A. #13D system are not required to meet Section 6-1, but shall contain an inside and outside audible bell for the system water flow.

6-2 All new or existing fire suppression systems that are installed for protection of a data center, computer room, clean room, kitchen hood system, and/or other high-hazard areas, are required to have this suppression system connected and monitored by an approved fire alarm system.

Section 7: PERMITS AND FEE SCHEDULE

7-1 An installation permit is required for any work performed for the installation or alteration of any sprinkler and/or standpipe system. This permit must be obtained from the Bureau of Fire Prevention prior to any work being started on the system.

7-2 Application for a permit shall be made on such form and in such manner as provided by the authority having jurisdiction.

7-3 Four (4) sets of calculations, drawings, and equipment cut-sheets must be on file with the Bureau of Fire Prevention before any permit for installation will be issued.

7-4 The permit fee must accompany the application for permit. The following fee structure includes the first plan review, a second review, the permit, and system acceptance testing/or inspection:

- A.) Commercial Systems (includes two field inspections)
 - 1-5 Heads \$100.00
 - 6-19 Heads \$200.00
 - 20-50 Heads \$250.00
 - 51-100 Heads \$300.00
 - 101-200 Heads \$400.00
 - Over 200 Heads \$500.00
- B.) Residential System (includes two field inspections) - Flat rate of 200.00 dollars
- C.) Standpipe Riser - 100.00 dollars (per riser)
- D.) Kitchen Hood/Duct Suppression System - 175.00 dollars (per hood)
- E.) Specialized Suppression System - 150.00 dollars (per system)

7-4.1 If any system requires a third review and/or acceptance test, a fee at the rate of fifty-percent (50%) of the original fee paid will be applicable.

7-4.2 All permit fees and outstanding fines must be paid in full to the Fire District, before final approval and testing of the system.

Section 8: TESTING AND MAINTENANCE

8-1 Prior to putting any fire suppression system into service, a final acceptance test shall be run in the presence of the authority having jurisdiction. A minimum of forty-eight (48) hours notice to the Bureau of Fire Prevention is required.

8-2 Upon completion of the acceptance test, the authority having jurisdiction shall be provided with a copy of the "Contractor's Material and Test Certificate" and the Contractor's Material and Test Certificate for underground and aboveground piping.

8-3 Following the completion of the acceptance test of any required fire pump, the authority having jurisdiction shall be provided with a copy of the fire pump test results from the installing contractor.

8-4 All inspections and system tests shall be conducted by the guidelines listed in N.F.P.A. #25 – Water Based Fire Protection Systems, 2008 Edition. Copies of the annual inspection reports are to be on file with the Bureau of Fire Prevention of the District.

8-5 The District will arrange a time for an initial inspection and periodic re-inspections of fire alarm or detection systems with the contractor, building manager or other owners/operators of said systems. After the contractor, building manager or other owner/operator of the fire alarm or detection system fails to be prepared and/or otherwise breaks one (1) appointment for inspection or re-inspection, the District will charge the offending party a fee of \$100.00 for each additional inspection or re-inspection appointment that is broken.

Exception: Proper notification to the Fire Prevention Bureau within twenty-four (24) hours of scheduled appointment.

Section 9: Any amendments to the Ordinance shall be in full force and effect from and after its passage. The balance of the Ordinance remains in full force and effect at least ten (10) days after publication of this Ordinance as provided by law.

Section 10: If any section, paragraph or provisions of this Ordinance shall be held invalid or unenforceable for any reason, such invalidity or unenforceability shall not affect any of the remaining provisions of this Ordinance.

ADOPTED this 13th of August, 2009 by the following roll call vote:

AYES: _____

NAYS: _____

ABSENT: _____

President, Board of Trustees
Deerfield-Bannockburn Fire Protection District

ATTEST:

Secretary, Board of Trustees
Deerfield-Bannockburn Fire Protection District

STATE OF ILLINOIS)
)
COUNTY OF LAKE) SS

SECRETARY'S CERTIFICATE

I, Jeffery Hansen, the duly qualified and acting Secretary of the Board of Trustees of the Deerfield-Bannockburn Fire Protection District, Lake County, Illinois, do hereby certify that attached hereto is a true and correct copy of an Ordinance entitled:

ORDINANCE NO. 2009-04

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OF THE DEERFIELD-BANNOCKBURN FIRE PROTECTION DISTRICT**

Which Ordinance was duly adopted by said Board of Trustees at a meeting held on the August 13, 2009

I do further certify that a quorum of said Board of Trustees was present at said meeting, and that the Board complied with all requirements of the Illinois Open Meetings Act.

IT WITNESS WHEREOF, I have hereunto set my hand this 13th day of August, 2009.

Secretary, Board of Trustees
Deerfield-Bannockburn Fire Protection District