**Model Fire Sprinkler Ordinance**

MTAS Research and Information Center | August 2018

This is a model fire sprinkler ordinance for both commercial and residential property. Fire sprinkler systems save lives, property, and reduce the potential for large fires in the community, thus protecting the tax base. Residential sprinklers in large homes, defined as exceeding 4,800 feet, reduce the ISO required needed fire flow, thus saving money on water supply infrastructure such as larger water mains and increased plant capacity.

Edit this template to meet local needs.

Version: August 23, 2018

ORDINANCE XXX

AN ORDINANCE OF THE CITY OF <ANYTOWN>, TENNESSEE

AMENDING TITLE 7 OF THE CODE OF ORDINANCES

ESTABLISHING FIRE SPRINKLER REQUIREMENTS

WHEREAS, the City of <Anytown> has determined that the safety, health, and welfare of the residents and business owners of the City of <Anytown> are promoted by providing for the prevention and extinguishment of fire, and the reduction of community risk from fire; and

WHEREAS, the City of <Anytown> desires to provide a level of built-in fire protection so as to provide minimal risk to the residents, visitors, homes, businesses, and other at risk property; and

WHEREAS, according to the National Fire Protection Association, and based on data from the United States Fire Administration, sprinklers are a highly effective and reliable part of a building’s fire protection system, capable of saving both life and property; and

WHEREAS, the City of <Anytown> desires to proactively protect commercial, industrial, and institutional occupancies through the use of properly installed fire sprinkler systems, which will protect life, property, and the tax base; and

WHEREAS, <Anytown>, recognizing that homes that are 4,800 square feet or more present a significant challenge to firefighters, and are treated as commercial buildings by the Insurance Services Office for the purpose of determining needed fire flows, desires to mitigate, through the use of properly installed residential sprinkler systems, the additional risk to life and property that large homes present.

NOW, THEREFORE, BE IT ORDAINED by the Board of Mayor and Aldermen/Board of Commissioners/Commission of the City of <Anytown> as follows:

SECTION 1. Title 7 of the City of <Anytown> Code of Ordinances is amended by adding the following new sections, to be codified appropriately upon adoption.

**7-601 TITLE.**

This section shall be known and cited as the “City of <Anytown> Fire Sprinkler Ordinance.”

**7-602 AUTOMATIC SPRINKLER SYSTEM REQUIREMENTS.**

1. An approved automatic sprinkler system shall be provided for the following new or renovated buildings or structures:
2. Group A, Assembly, A1, A2, A3, A4: all buildings or structures 3,500 square feet gross floor area or more, or with an occupant load of 300 persons or more, whichever is more stringent;
3. Group B, Business: all buildings or structures 3,500 square feet or more gross floor area;
4. Group E, Educational: all building or structures;
5. Group F, Factory/Industrial, F-1, F-2: all buildings or structures 3,500 square feet or more gross floor area;
6. Group H, High-Hazard, H-1, H-2, H-3, H-4, H-5: all buildings or structures 3,500 square feet or more gross floor area;
7. Institutional Group: I-1, I-2, I-3, I-4: all buildings or structures;
8. Group M: Mercantile: all buildings or structures 3,500 square feet or more gross floor area;
9. Residential: all residential buildings or structures as follows:
10. Hotel/motel R-1, R-2: NFPA 13;
11. Lodging and rooming houses R-1, R-2: NFPA 13R;
12. Board and care facilities R-4: NFPA 13R for 16 or less occupants; NFPA 13 for more than 16 occupants;
13. Multi-family R-2 (attached) three or more attached units up to four stories: NFPA 13R; three or more attached units more than four stories: (NFPA 13);
14. One and two-family dwellings: all one and two-family buildings or structures as follows:
15. all buildings or structures 4,800 square feet or more finished floor area (excluding garages); NFPA 13D
16. all buildings exceeding 2,000 square feet and set back more than 300 feet from a public road; NFPA 13D
17. all buildings that are farther than 500 feet from a fire hydrant that is capable of supplying the minimum required fire flow for that dwelling; NFPA 13D
18. all buildings in which the distance between adjacent dwellings or structures is less than 20 feet; NFPA 13D;
19. Group S, Storage, S-1, S-2: all buildings or structures 3,500 square feet or more gross floor area;
20. Mixed uses: all buildings or structures 3,500 square feet or more gross floor area; mixed occupancy buildings shall be classified in accordance with the occupancy of the building which has the most stringent requirements in regards to this section.
21. For the purpose of this section, occupancies shall be classified in accordance with Chapter 3 of the International Building Code.
22. Renovation
    1. For the purpose of this section only, major renovation shall be defined as construction to the building that is greater than 50% of the estimated cost of reconstruction of the entire structure.
    2. In the event that a disagreement regarding the estimated cost percentage occurs, the building owner, or his or her agent, shall provide a certified appraisal of the structure and a certified construction estimate shall be furnished to the Chief of the Fire Department, or the Fire Marshal, upon request, as proof of compliance. Appraisal shall not include associated land cost, furnishings or decorations.
23. Any addition to an existing building or structure which brings the gross floor area above the applicable square footage listed in division (A) of this section shall cause the entire building or structure to meet the requirements of that section, with the exception of A-9 one and two-family dwellings.
24. Higher Hazard Classification
    1. gherHigher Hazard HAny change in use and occupancy to a structure that is of a higher hazard classification as defined in the International Building or Fire Code, and the gross square footage is above the applicable square footage as listed in division (A) of this section, shall cause the entire building or structure to meet the requirements of that section.
    2. High hazard shall be classified as those facilities that are likely to burn with extreme rapidity or from which explosions are likely.
25. For the purpose of this section, only approved four hour rated fire walls with properly protected openings shall be considered when calculating the gross floor area, or constituting a separate building in occupancies specified in division (A) of this section. The gross floor area in any building with an approved four-hour firewall shall not exceed 10,000 square feet without the installation of a sprinkler system as specified in division (A) of this section.
26. Where automatic sprinkler protection is determined to increase the hazard to the property or its occupants to be protected, other automatic extinguishing systems appropriate for the hazard shall be provided.
27. Any building that is required to be equipped with a fire department connection (FDC), the fire department connection shall be located on the front street side of the facility. Special circumstances that would prevent this shall be reviewed and altered only by the fire marshal, or his or her designee, on a case by case basis. Physical location of the fire department connection (FDC) shall be determined by the following factors:
28. Hazard classification of the facility as defined in NFPA 13:
29. *Light hazard*. May be located on the surface of the structure. FDC shall be located not to exceed five feet from the corner of the structure and shall not be higher than five feet from finished grade nor less than 18 inches above finished grade.
30. *Ordinary hazard*. Same as light hazard.
31. *Extra hazard*. Fire Department connection (FDC) shall be located a minimum of 40 feet from the structure.
32. Height of structure or building.
33. Any building or structure three stories or less that meets the requirements as defined in this subchapter shall be permitted.
34. Any building or structure exceeding three stories in height shall have the fire department connection (FDC) located a distance away from the structure or building at least half the height of the structure but in no case shall the distance be less than 40 feet.
35. Any building that is required to be equipped with a fire department connection (FDC) for the automatic sprinkler system as described in NFPA 13, 13D, or 13R shall have a reliable water supply for use by the fire department located within 100 feet of the (FDC). A reliable water supply shall mean a fire hydrant that meets the City of <Anytown>’s fire flow requirements. A reliable water supply shall be connected to the Utility Division’s water system. For special circumstances, with the approval of the fire chief or the fire marshal, an alternative water supply may be proposed when connection to the Utility Division’s system is not practical.
36. Any automatic sprinkler system provided as a requirement of this section or other code requirements shall be adequately supervised as follows:
37. The extinguishing system shall be electrically connected to a central (UL) station facility meeting the requirements of NFPA 72;
38. Where a system may be disabled by closing of valves, interruption of power and the like, adequate supervision shall be provided to sound at least a local alarm when the system is deactivated and a trouble signal to the central station facility;
39. Automatic sprinkler flow alarms shall be zoned to indicate a water flow and not a general fire alarm to the central station;
40. Where building fire alarm facilities are provided, actuation of the extinguishing system shall also cause the building alarm to sound in accordance with NFPA 72;
41. Where building fire alarm facilities are not provided, actuation of the extinguishing system shall require at least one building alarm to sound within the facility. Alarms shall be installed in accordance with NFPA 72;
42. Where multiple tenants are located within a building or structure, at least one alarm sounding device shall be provided for each tenant space located in a constantly attended location that upon actuation of the extinguishing system shall sound an alarm to notify occupants to be aware of their surroundings. This device is not intended to be an evacuation device, its function and intent is for notification purposes only. Alarms shall be installed in accordance with NFPA 72.
43. Automatic sprinkler systems and appurtenances shall be installed, tested, inspected, and maintained in accordance with National Fire Protection Standards and Tennessee Code Annotated laws.
44. No sprinkler system shall be installed without the approval of the fire official.
45. Upon completion of installation and prior to final approval of the building, all NFPA 13D residential sprinkler systems shall be subject to an acceptance test and inspection. The fire official shall be notified at least three working days prior to such test.
46. The building owner shall be responsible for the proper maintenance of the sprinkler system, including ensuring that the system is kept in proper operating condition.
47. Where these requirements conflict with the City of <Anytown> building code, fire code, or state standards, or federal standards, the more stringent requirement shall apply.