

TITLE 7**FIRE PROTECTION AND FIREWORKS**¹**CHAPTER**

1. FIRE DISTRICT.
2. FIRE CODE.
3. FIRE DEPARTMENT.
4. FIRE SERVICE OUTSIDE CITY LIMITS.
5. FIREWORKS.

CHAPTER 1**FIRE DISTRICT****SECTION**

7-101. Fire limits described.

7-101. Fire limits described. The corporate fire limits shall include all that area within one (1) block east and west and two (2) blocks north and south of the town square (1995 Code, § 7-101)

¹Municipal code reference

Building, utility and residential codes: title 12.

CHAPTER 2

FIRE CODE¹

SECTION

- 7-201. Fire code adopted.
- 7-202. Enforcement.
- 7-203. Definition of "municipality."
- 7-204. Gasoline trucks.
- 7-205. Modifications.
- 7-206. Installation of rooftop and ground mounted solar photovoltaic array systems and their appurtenances.
- 7-207. Available in the planning and codes enforcement office.
- 7-208. Violations and penalty.

7-201. Fire code adopted. (1) Pursuant to authority granted by *Tennessee Code Annotated* , §§ 6-54-501 to 6-54-506, and for the purpose of providing a reasonable level of life safety and property protection from the hazards of fire, explosion or dangerous conditions in new and existing buildings, structures, and premises, and to provide safety to fire fighters and emergency responders during emergency operations, the *International Fire Code*, 2012 edition, including Appendix Chapters A, B, C, D, E, F, G, H, I and J, as published by the International Code Council,² be and is hereby adopted as the fire code of the City of Fayetteville, in the State of Tennessee regulating and governing the safeguarding of life and property from fire and explosion hazards arising from the storage, handling and use of hazardous substances, materials and devices, and from conditions hazardous to life or property in the occupancy of buildings and premises as herein provided; providing for the issuance of permits and collection of fees therefor; and each and all of the regulations, provisions, penalties, conditions and terms of said fire code on file in the office of the City of Fayetteville are hereby referred to, adopted, and made a part hereof, as if fully set out in this section, with the additions, insertions, deletions and changes, if any, prescribed in subsection (2) of this section.

- (2) That the following sections are hereby revised:
 - Section 101.1 City of Fayetteville.
 - Section 109.3. Violation of Fire Code, \$50.00 each violation per day.

¹Municipal code reference

Building, utility and residential codes: title 12.
Life safety code: title 12, chapter 10.

²Copies of this code are available from the International Code Council, 900 Montclair Road, Birmingham, Alabama 35213-1206.

Section 111.4. not less than \$50.00 or more than \$50.00 per day of violation.

(3) That the geographic limits referred to in certain sections of the 2012 *International Fire Code* are hereby established as follows:

Section 5504.3.1.1 (geographic limits in which the storage of flammable cryogenic fluids in stationary containers is prohibited):

As approved by the Fire Chief

Section 5704.2.9.6.1 (geographic limits in which the storage of Class I and Class II liquids in above-ground tanks outside of buildings is prohibited): As approved by the Fire Chief

Section 5706.2.4.4 (geographic limits in which the storage of Class I and Class II liquids in above-ground tanks is prohibited): As approved by the Fire Chief

Section 6104.2 (geographic limits in which the storage of liquefied petroleum gas is restricted for the protection of heavily populated or congested areas): As approved by the Fire Chief. (Ord. #2014-25, Nov. 2014, modified)

7-202. Enforcement. The fire prevention code herein adopted by reference shall be enforced by the chief of the fire department. (1995 Code, § 7-202)

7-203. Definition of "municipality." Whenever the word "municipality" is used in the fire prevention code herein adopted, it shall be held to mean the City of Fayetteville. (1995 Code, § 7-203)

7-204. Gasoline trucks. No person shall operate or park any gasoline tank truck within the central business district or within any residential area at any time except for the purpose of and while actually engaged in the expeditious delivery of gasoline. (1995 Code, § 7-204)

7-205. Modifications. The chief of the fire department may recommend to the board of mayor and aldermen modifications from the provisions of the fire prevention code upon application in writing by any property owner or lessee, or the duly authorized agent of either, 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. The particulars of such modifications when granted or allowed shall be contained in a resolution of the board of mayor and aldermen. (1995 Code, § 7-205)

7-206. Installation of rooftop and ground mounted solar photovoltaic array systems and their appurtenances. (1) Installation of photovoltaic array systems shall be installed in accordance with the provisions contained herein. In the event there is a conflict between the provision contained

herein, or any other code or regulation adopted by the City of Fayetteville, the more stringent requirement shall apply.

(2) Marking. PV systems shall be marked. Marking is needed to provide emergency responders with appropriate warning and guidance with respect to working around and isolating the solar electric system. This can facilitate identifying energized electrical lines that connect to solar modules to the inverter, as these should not be cut when venting for smoke removal.

Material used for marking must be weather resistant. It is recommended that Underwriters Laboratories Marking and Labeling System 969 (UL969) be used as standard to determine weather rating. (UL listing of markings is not required.)

(3) Main service disconnect. For residential applications, the marking may be placed within the main service disconnect. If the main service disconnect is operable with the service panel closed, the marking shall be placed on the outside of the cover.

For commercial applications, the marking shall be placed adjacent to the main service disconnect in a location clearly visible from the location where the lever is operated.

(a) Marking content and format:

(i) Marking content: CAUTION, SOLAR ELECTRIC SYSTEM CONNECTED;

(ii) Red background;

(iii) White lettering;

(iv) Minimum three-eighths inches (3/8") letter height;

(v) All capital letters;

(vi) Arial or similar font;

(vii) Reflective, weather resistant material suitable for exposure to the environment (Example: CAUTION, SOLAR ELECTRIC SYSTEM CONNECTED).

(4) Marking for direct current conduit, raceways, enclosures, cable assemblies, and junction boxes. Marking is required on all interior and exterior DC conduit, raceways, enclosures, cable assemblies, and junction boxes to alert the fire service to avoid cutting them. Marking should be placed on all interior and exterior DC conduit, raceways, enclosures, and cable assemblies, every ten feet (10'), at turns and above and below penetrations and all DC combiner and junction boxes.

(a) Marking content and format:

(i) Marking content: CAUTION SOLAR CIRCUIT;

(ii) Red background;

(iii) White lettering;

(iv) Minimum three-eighths inches (3/8") letter height;

(v) All capital letters;

(vi) Arial or similar font;

(vii) Reflective, weather resistant material suitable for exposure to the environment (Example: CAUTION SOLAR CIRCUIT).

(5) Inverters. The inverter is a device used to convert DC electricity from the solar system to AC electricity for use in the building's electrical system or the grid. No markings are required for the inverter.

(6) Access, pathways, and smoke ventilation. (a) Access and spacing requirements shall be observed in order to:

- (i) Ensure access to the roof;
- (ii) Provide pathways to specific areas of the roof;
- (iii) Provide for smoke ventilation opportunity areas;
- (iv) Provide emergency egress from the roof.

(b) The local jurisdiction may create exceptions to this requirement where access, pathway or ventilation requirements are reduced due to:

- (i) Proximity to adjacent exposures;
- (ii) Alternative access opportunities (as from adjoining roofs);
- (iii) Ground level access to the roof area in question;
- (iv) Adequate ventilation opportunities beneath solar array (as with significantly elevated or widely spaced arrays);
- (v) Adequate ventilation opportunities afforded by module set back from other rooftop equipment (i.e. shading or structural constraints may leave significant areas open for ventilation near other rooftop equipment);
- (vi) Automatic ventilation devices;
- (vii) New technology, methods, or other innovations that ensure adequate fire department access, pathways and ventilation opportunities.

Designation of ridge, hip, and valley does not apply to roofs with 2-in-12 or less roof pitch. All roof dimensions are measured to centerlines.

Roof access points shall be defined as areas where ladders are not placed over openings (i.e. windows and doors) and are located at strong points of building construction and in locations where they will not conflict with overhead obstructions (i.e. tree limbs, wires, or signs).

(7) Residential systems--single- and two-family residential dwellings. Plan review is required if a system is to be installed that will occupy more than fifty percent (50%) of the roof area of a residential building. Examples of this requirement appear t the end of this document.¹

- (a) Access/pathways. (i) Residential buildings with hip roof layouts. Modules shall be located in a manner that provides one (1)

¹Examples are available in the office of the city administrator.

three foot (3') wide clear access pathway from the eave to the ridge on each roof slope where modules are located. The access pathway shall be located at a structurally strong location on the building (i.e. bearing wall);

(ii) Residential buildings with a single ridge. Modules shall be located in a manner that provides two (2) three foot (3') wide access pathways from the eave to the ridge on each roof slope where modules are located;

(iii) Hips and valleys. Modules should be located no closer than one and one-half feet (1 1/2') to a hip or a valley if modules are to be placed on both sides of a hip or valley. If the modules are to be located on only one (1) side of a hip or valley that is of equal length then the modules may be placed directly adjacent to the hip or valley.

(b) Smoke venting. The modules should be located no higher than three feet (3') below the ridge.

(8) Commercial buildings and residential housing comprised of three (3) or more dwellings. Exception, if the fire official determines that the roof configuration is similar to residential (i.e. townhouses, condominiums, or single-family attached buildings) the fire code official may make a determination to apply the residential access and ventilation requirements.

(a) Access. There shall be a minimum six foot (6') wide clear perimeter around the edges of the roof.

Exception, if either axis of the building is two hundred fifty feet (250') or less in length, there shall be a minimum four feet (4') wide clear perimeter around the edges of the roof.

(b) Pathways. Pathways shall be established for the design of the solar installation. Pathways shall meet the following requirements:

(i) Shall be over structural elements;

(ii) Centerline axis pathways should be provided in both axis of the roof. Centerline axis pathways should run on structural members or over the next closest structural member nearest the centerline of the roof.

(iii) Shall be straight lines not less than four feet (4') clear to roof standpipes;

(iv) Shall be straight line not less than four feet (4') clear to skylights and/or ventilation hatches;

(v) Shall provide not less than four feet (4') clear around roof access hatch with at least one (1) not less than four feet (4') clear pathway to parapet or roof edge.

(c) Smoke ventilation. (i) Arrays shall be no greater than one hundred fifty by one hundred fifty feet (150' x 150') in distance in either axis;

(ii) Ventilation options between array sections should be either:

- (A) A pathway eight feet (8') or greater in width;
- (B) Four feet (4') or greater in width pathway and bordering on existing roof skylights or ventilation hatches;
- (C) Four feet (4') or greater in width pathway and bordering four feet by eight feet (4' x 8') "venting cutouts" every twenty feet (20') on alternating sides of the pathway.

(9) Location of Direct Current (DC) conductors. Conduit wiring systems, and raceways for photovoltaic circuits should be located as close as possible to the ridge, hip or valley and from the hip or valley as directly as possible to an outside wall to reduce trip hazards and maximize ventilation opportunities.

Conduit runs between sub arrays and to DC combiner boxes should use design guidelines that minimize the total amount of conduit on the roof by taking the shortest path from the array to the DC combiner box. The DC combiner boxes are to be located such that conduit runs are minimized in the pathways between arrays.

To limit the hazard of cutting live conduit in venting operations, DC wiring shall be run in metal conduit or raceways when located within enclosed spaces in a building and should be run to the maximum extent possible along the bottom of load-bearing members.

(10) Non-habitable buildings. These regulations shall not apply to non-habitable structures. Examples of non-habitable structures include, but are not limited to, parking shade structures, solar trellises, etc.

(11) Ground mounted photovoltaic arrays. Setback requirements do not apply to ground-mounted, freestanding photovoltaic arrays. A clear brush area of ten feet (10') is required for ground mounted photovoltaic arrays.

(12) The attached pictorial examples (1-8) shall be attached hereto and incorporated herein.¹ (1995 Code, § 7-207)

7-207. Available in planning and codes enforcement office.

Pursuant to the requirements of the *Tennessee Code Annotated*, § 6-54-502, one (1) copy of the fire code has been placed on file in the planning and codes enforcement office and shall be kept there for the use and inspection of the public.

7-208. Violations and penalty. It shall be unlawful for any person to violate any of the provisions of this chapter or the fire code herein adopted, or fail to comply therewith, or violate or fail to comply with any order made thereunder; or build in violation of any detailed statement of specifications or

¹Examples are available in the office of the city administrator.

plans submitted and approved thereunder, or any certificate or permit issued thereunder, and from which no appeal has been taken; or fail to comply with such an order as affirmed or modified by the board of mayor and aldermen or by a court of competent jurisdiction, within the time fixed herein. The application of a penalty under the general penalty clause for the city code shall not be held to prevent the enforced removal of prohibited conditions. (1995 Code, § 7-206)

CHAPTER 3

FIRE DEPARTMENT¹

SECTION

7-301. Establishment, equipment, and membership.

7-302. Objectives.

7-303. Organization, rules, and regulations.

7-304. Records and reports.

7-305. Chief responsible for training and maintenance.

7-306. Chief to be assistant to state officer.

7-301. Establishment, equipment, and membership. There is hereby established a fire department to be supported and equipped from appropriations by the board of mayor and aldermen. All apparatus, equipment, and supplies shall be purchased by or through the municipality and shall be and remain the property of the municipality. The fire department shall be composed of a chief appointed by the city administrator and such number of physically-fit subordinate officers, fire marshal and firemen as the chief shall appoint and the fire committee shall approve. (1995 Code, § 7-301, modified)

7-302. Objectives. The fire department shall have as its objectives:

(1) To prevent uncontrolled fires from starting.

(2) To prevent the loss of life and property in case a fire does start.

(3) To confine fires to the place of origin.

(4) To extinguish uncontrolled fires.

(5) To prevent loss of life from asphyxiation or drowning.

(6) To perform such rescue work as its equipment and/or the training of its personnel makes practicable. (1995 Code, § 7-302)

7-303. Organization, rules, and regulations. The chief of the fire department shall set up the organization of the department, make definite assignments to individuals, and shall formulate and enforce such rules and regulations as shall be necessary for the orderly and efficient operation of the fire department. (1995 Code, § 7-303)

7-304. Records and reports. The chief of the fire department shall keep adequate records of all fires, inspections, apparatus, equipment, personnel, and work of the department. He shall submit a written report on such matters

¹Municipal code reference

Special privileges with respect to traffic: title 15, chapter 2.

to the board of mayor and aldermen once each month, and at the end of the year a detailed annual report shall be made. (1995 Code, § 7-304, modified)

7-305. Chief responsible for training and maintenance. The chief of the fire department, shall be fully responsible for the training of the firemen and the minimum training shall consist of having the personnel take the fire apparatus out for practice operations not less than once a month. (1995 Code, § 7-306)

7-306. Chief to be assistant to state officer. Pursuant to requirements of *Tennessee Code Annotated*, § 68-102-108, the chief of the fire department is designated as an assistant to the state commissioner of commerce and insurance and is subject to all the duties and obligations imposed by *Tennessee Code Annotated*, title 68, chapter 102, and shall be subject to the directions of the fire prevention commissioner in the execution of the provisions thereof. (1995 Code, § 7-307)

CHAPTER 4**FIRE SERVICE OUTSIDE CITY LIMITS****SECTION**

7-401. Use of equipment outside city restricted.

7-401. Use of equipment outside city restricted. The fire department shall answer calls within the corporate limits. The chief may, at his discretion, order fire department personnel and equipment to answer calls outside the limits described above in compliance with any mutual aid policy established between the city and other governmental entities. However, in such event an experienced driver must remain at the fire hall and no more than one (1) pumper and one (1) snorkel and twenty-five percent (25%) of the personnel may answer any such call. (1995 Code, § 7-401, modified)

CHAPTER 5**FIREWORKS****SECTION**

7-501. Fireworks unlawful.

7-502. Unlawful uses of fireworks.

7-501. Fireworks unlawful. It shall be unlawful for fire crackers, torpedoes, Roman candles, sparklers or other fireworks or substances designated and intended for pyrotechnic display to be sold within the fire limits of the city except in a building of masonry construction.

It shall also be unlawful to fire, discharge, or explode such fireworks within the corporate fire limits. (1995 Code, § 7-501)

7-502. Unlawful uses of fireworks. It is unlawful to discharge or use fireworks from city property, streets or sidewalks without prior written consent of the board of mayor and aldermen. It is unlawful to ignite or discharge fireworks within or throw them from a motor vehicle, and it is unlawful to place or throw ignited fireworks into or at a motor vehicle, or at or near any person or group of persons. It is unlawful to launch fireworks onto property of persons who have not given permission to do so. It is unlawful to use fireworks in any manner that endangers other persons or property. (1995 Code, § 7-502)