

ORDINANCE NO. 290

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF SOMERTON ARIZONA, AMENDING SECTION 7-1-1 OF ARTICLE 7-1 OF CHAPTER 7; SECTION 7-1-1-E RULES AND REGULATIONS; SECTION 4-2-4 APPOINTMENT, POWERS AND DUTIES OF CHIEF; Article 4-3 ADOPTION OF THE UNIFORM FIRE CODE OF THE CITY CODE OF THE CITY OF SOMERTON ADOPTING BY REFERENCE UNIFORM FIRE CODES

WHEREAS, on August 15, 1995, the City Council adopted the 1993 Edition of the Uniform Fire Code, with amendments; and,

WHEREAS, the City of Somerton is desirous of adopting the 2003 Edition of the Uniform Fire Code, NFPA-1, to keep current with the code cycle and amendments to reflect modern technology, materials and techniques:

NOW THEREFORE, BE IT ORDAINED by the City Council of the City of Somerton as follows:

Section 7-1-1 of Article 7-1 of Chapter 7 of the City Code of the City of Somerton is hereby amended to read as follows:

Section 7-1-1-G Building Reference Codes

The following described documents containing the following described codes are hereby adopted by reference as if fully set out herein, as the building Code of the City of Somerton, Arizona, pursuant to Arizona Revised Statutes. Title 9, Chapter 7, Article 1, Sections 9-801 et seq.

G. NFPA-1, Uniform Fire Code, 2003 Edition,

That certain document, one (1) copy of which is on file in the Somerton Fire Department, known as NFPA 1 (the Uniform Fire Code), 2003 Edition, including Annexes "A", "B", "D", "E", "F", "H", and "I" published by the National Fire Protection Association, with certain amendments listed herein, which document was made a public record by Ordinance No. 220 of the City, is hereby adopted by reference and made a part hereof as if fully set out in this article.

NOTE: The brown print found after each section is not a part of the Ordinance. It is provided in this draft to explain the various changes and amendments proposed. The final, legal Ordinance does not contain the detailed explanations.

This section lists the model code (2003 Edition of NFPA 1) and the annexes to be adopted. Annexes must be specifically adopted, as they are not a part of the published code.

Annex "A" (page 320). Explanatory Material. This is a reference to define in greater detail

various sections within the fire code. Whenever a code section number appears followed by an asterisk, the reader can find further explanation in Annex “A”. This is a standard feature utilized by all NFPA pamphlets.

Annex “B” (page 411). Oxidizers and Organic Peroxides. This reference provides information, explanations and examples to illustrate and clarify the hazard categories contained in Chapter 70. The categories are based on 29 CFR. Specifically it provides information on concentration, diluents, maximum temperatures, health-flammability-reactivity and type of containment.

Annex “D” (page 421) Hazardous Materials Management Plans and Inventory Statements. Chapter 60, found in the body of the code, requires a facility to submit these documents to the AHJ. This annex provides a guide to create and evaluate such a document.

Annex “E” (page 430) Model Citation Program. This provides a guide to develop a citation program for enforcement of the code. This in and of itself does not establish a program, only a guide.

Annex “F” (page 436) Model Fees and Charges Program. As above.

Annex “H” (page 441) Fire Flow Requirements. Provide a chart to determine the required fire flow for buildings taking into consideration area, type of construction and calculates a reduction in fire flow when a fire protection system is present.

Annex “I” (page 443) Fire Hydrant Location and Distribution. This Annex determines the number and spacing of hydrants by fire flow requirement. This is a change from the previous code.

SECTION 2: That the Somerton City Code, Section 7-1-1-G of Article 7-1 of Chapter 7, be amended to read as follows:

Section 7-1-1-G Amendments.

This Edition of NFPA 1, the Uniform Fire Code, adopted by the provision of this chapter is hereby amended, altered and changed in the following respects:

NOTE: The section numbers that follow are the reference sections found in NFPA-1.

(In this section, the ordinance lists the changes or alterations to the model code to customize the adopted code to the needs of the community.)

1.3.1. Application. is hereby amended by the addition of the following sentence:

All construction and/or alterations of a building, which require a building permit, except for fire sprinkler and fire alarm systems shall comply with the adopted building code of the City of Somerton.

(This additional sentence will negate any confusion should there ever arise a conflict between the fire and building codes where new construction or remodel are involved. We have been through the codes and find that the documents appear to work together. This amendment is provided to assure a comfort level.)

1.3.2 Reference Standards. is hereby amended as follows:

When reference is made to the Building Code, it shall mean the most recent Building Code adopted by the City of Somerton.

(Each code, building and fire, references the other for further detail. The Fire Department agrees that the most current adopted Building code will take precedence in all new construction requirements except when to fire sprinkler.)

1.3.8 Conflicts. is hereby amended as follows:

Repairs, renovations, alterations, reconstruction, change of occupancy, and additions to buildings shall conform with the adopted building code of the jurisdiction except for repairs, renovation, alteration and reconstruction of fire sprinkler and fire alarms. Those activities shall be regulated by the fire code adopted by this ordinance.

(The reference to the Life Safety Code, NFPA 101, is removed. The same justification as above)

1.7.10 Plans and Specifications. is hereby amended by the addition of the following paragraph:

All plans, specifications, and calculations shall be sealed by a registrant licensed to practice in the state of Arizona. Calculation sheets for fire sprinkler systems shall be submitted on the same size paper as the layout drawings and made a permanent part of the submitted design drawings.

(The design of a fire protection system requires special knowledge of the mathematical and physical sciences. A licensed registrant will be required to seal all hydraulically calculated fire sprinkler plans, calculations and specifications. The requirement to provide the calculations submitted on blue lines instead of 8 ½" by 11" allows the calculations to become a permanent record of the fire sprinkler design. History has proven that the customer keeps in his possession the layout drawings but never seems to have the hydraulic calculations.)

1.10.1.1 Establishment of Board of Appeals. is hereby amended by striking the entire paragraph and replacing it with the following:

“Whenever reference is made to the “Board of Appeals” in the City Fire Code, it shall mean the City of Somerton “Development Review Committee.” Whenever the chief of the fire department shall disapprove an application or refuses to grant license or permit applied for, or when it is claimed that the provisions of the code do not apply or that the true intent and meaning of the code has been misconstrued or wrongly interpreted, the applicant may appeal the decision of the chief of the fire department to the “Development Review Committee”, as established and referred to in this-Chapter 1- of this code, within thirty (30) days from the date of the decision.

(The model code as written requires that an appeals board be established. As there already exists a sitting board established by the City Council for the building code & development review, we can utilize this board. This will for additional City Staff to forward a recommendation to Council.)

1.12 Permits and Approvals. The following shall be added to this section:

1.12.2.5 Fees and Charges.

All “activity” permits required by the fire code shall be subject to the table of fees. A fee in accordance with the following schedule shall be paid to the City of Somerton the time of application for: (1) an installation or removal; (2) an activity permit; (3) other service or special inspection. These fees are not charges for normal business inspections but are used in the event that there is a change in occupancy, addition or changes to occupancy during the business license year or if a State mandated inspection is required beyond the normal business inspection which occurs as a result of business license renewal.

Failure to apply for necessary permits or service can result in a double charge for such. Fees are payable upon permit application.”

Table 1.12.2.5 Activity Permit Fee Schedule:

Carnivals and fairs		\$66.00
Cutting and welding operations		\$33.00
Display Fireworks		\$66.00
Exhibit and trade shows		\$66.00
Explosives or blasting		\$100.00
Fuel Tank installation or removal		\$66.00
Liquefied Petroleum Gas installation		\$66.00
Installation less than 500 gallons		\$33.00
Membrane structures, tents, and canopies		
Permanent or temporary		\$33.00
Open burning		\$66.00
Pyrotechnics before a proximate audience		\$100.00
Torch applied roofing operations		\$66.00
Fire Inspections mandated by State for licensing		
Hazardous work		\$66.00
Day care-commercial		\$100.00
Day care-home based		\$33.00
Adult care-commercial		\$66.00
Adult care-home based		\$33.00
Fire Sprinkler alterations	1-25 heads	\$33.00
	26-50 heads	\$66.00
Fire Alarm	1-10 devices	\$33.00
	11-25 devices	\$66.00
	26-50 devices	\$132.00

(Note: These fees are based on a \$33.00 per hour rate rounded up. The projections come from reviewing fee schedules in effect in cities around Arizona. Our fees are less as they are based on 3 staff X 11.00/hour X estimated time involved in the inspection.)

1.12.2.6 Standard Hourly Fee. This is a special fee should there be a need for special service or re-inspections. This standard hourly fee is not a fee in addition to permit fees listed above.

a. After normal working hours: There shall be a standard hourly fee of thirtythree dollars (\$33.00), with a one-hour minimum, charged for all special, after-hours service, inspections and plan review work. This is provided to accommodate the developer who may need a higher level of service and is willing to pay an additional fee for that service.

b. Special services: In addition, the standard hourly fee is established for special requests for service such as the following: a review for the use of alternate methods, consultation, fire watch, stand-by service, and hydrant flow testing.

c. Re-inspections: Another application for the standard hourly fee is for the commercial fire inspection program. There will be no charge for the initial annual commercial fire inspection and one follow-up, however, should the business require more than one follow-up re-inspection that business shall be charged at the standard hourly fee with a half-hour minimum charge for each additional re-inspection.

(The addition of permit fees is the greatest change in this code proposal. The model fire code dictates that a permit must be issued for these events and process, which require special review and inspection. These additional activities impact the division and its personnel. Charging the end user for this special service is reasonable and is currently practiced in nearly every other community in the state that has an adopted fire code. To date, these services have been provided at no charge)

Chapter 2 Reference Publications.

2.2 NFPA Publications. is hereby amended as follows:

Any references to the 2003 Edition of NFPA 5000 shall be changed to name the most currently adopted Building Code, which is the official building code of reference.

(This amendment will eliminate the NFPA 5000 and names, in its place the most currently adopted Building Code. The adopted codes tell us when to do things. The standards (or pamphlets) tell us how. The adopted standards are technical manuals that prescribe the accepted practices of installation application, testing and maintenance. The National Fire Protection Association (NFPA) has provided standards to industry and communities for over one hundred years. This department has historically adopted the NFPA standards in order to be in line with the State Fire Marshal's Office. The Arizona Revised Statute requires local fire departments that adopt and enforce a fire code be at least as restrictive as the State Code.)

Chapter 3 Definitions.

3.3.125.1 Combustible Liquid. is hereby amended by addition of the following paragraph:

NOTE: Storage and use of combustible liquids with a flash point under 141 degrees F. in outdoors areas and areas without climatic controls will be treated as Class I-C flammable liquids throughout the code.

(This change is due to our desert climate and the effect that heat has on a combustible liquids. The normal definition of the more stable "combustible" liquid is, " a liquid having a flash point at or above 100 degrees F. As our summer temperatures easily exceed that amount it causes the

product to readily vaporize and act as a flammable liquid and it is necessary to have a higher standard in our unique climate. This is the same standard that DOT currently utilizes.)

Chapter 4 General Requirements.

4.5.7 Changes of Occupancy. is hereby amended as follows:

In order to determine when a change of occupancy will initiate a fire sprinkler retrofit, the following will be added to sub-section (1):

- (1) For the purpose of determining if a change of occupancy will be a more hazardous operation requiring the retrofit of a fire sprinkler system, the 2003 Edition of the International Existing Building Code, Table 812.4.1 will be referenced. See Chapter 10.3.4.

(This is a similar approach to the previous code. This table deals specifically with “life safety” and “exiting”. It is the best and most specific table to use to compare the severity of occupancy hazard in a change of occupancy when determining when a fire sprinkler should be installed.)

Chapter 5 Performance-Based Options. No changes
Chapters 6, 7, 8, and 9 Are stated as reserved in the Model Code.

Chapter 10 General Fire Safety.

10.3.4 Changes of Occupancy. All of 10.3.4 is replaced with the following:

Changes made in the character or use of an occupancy shall be in accordance with the Building Code provided a new certificate of occupancy is issued. See Chapter 4.5.7.

(This language is consistent with previous codes and provides a more consistent process for change of use.)

10.13.1.1 Premises Identification. is hereby amended by addition of the following paragraph:

NFPA 704, figure 901c shall be used to determine the size of address lettering and numbering.

(The model fire code does not specify size of address numbers. This is important for address identification from the street. The NFPA pamphlet utilizes a simple and direct method to determine the length and stroke of address identification by distance from the right of way.)

Chapter 11 Building Services, No changes.
Chapter 12 Features of Fire Protection, No changes.

Chapter 13.3 Automatic Sprinklers. is hereby amended as follows:

13.3.2 to 13.3.2.24 Where Required. All references to Existing facilities remain. All references to “New” occupancies is hereby amended to read as follows:

A. An automatic sprinkler system shall be installed throughout all levels of all buildings here after constructed, except for Group U and R-3 occupancies.

Exception 1: Buildings housing a group A-1, A-2, A-3, A-4, A-5, B, E, F-2, M, or S-2 occupancy having a calculated fire flow less than or equal to seven hundred fifty (750) gallons per minute.

NOTE 1: For the purposes of this section, the accepted method of calculating required fire flow shall be the Insurance Service Office’s “Needed Fire Flow” (NFFi 1980) as outlined in the “Fire Suppression Rating Schedule” (1993).

NOTE 2: For the purposes of this article, fire resistive area separation walls will not be considered a barrier creating a separate building.

(This is the same provision found in two previous codes. It basically requires a fire protection system in all buildings except group U (private garages, carports, sheds and green houses), and R-3 (residential dwellings accommodating 5 or fewer persons. The reason for not allowing area separation walls in lieu of a fire sprinkler system is due to the fact that the integrity of areas separation walls are not maintained.)

Exception (1) allows an exception to this requirement that has proven to be a fair and flexible method to exempt structures that are below established risk criteria. This exemption is for those classifications of uses within structures listed in “Exception 1” with a calculated fire flow of 750 gallons per minute or less.

Creating an exemption for fire sprinklers by fire flow (gallons per minute) rather than by an arbitrary square footage has proven to be a more sensible and defensible approach. This method is an actual risk analysis based on hazard criteria developed by the Insurance Service Office (ISO). This has been the criterion used since 1991 to determine if the structure should be fire protected by sprinkler or not. It takes into account the size of the building, the construction materials and methods, the occupancy or use of the building and an exposure factor (distance to other buildings or property lines that may be built upon).

Exception 2: Temporary use of Modular or factory-built structures shall not be required to provide an automatic fire sprinkler system, provided that the use of the structure and the

“Certificate of Occupancy” is limited to one year from the time of set-up to removal.

(This exception is for the benefit of the construction industry that would require temporary office and operational buildings for the development purposes. It also benefits the school districts that may need temporary facilities during renovation or expansion.)

Exception 3: Open canopy structure. When automatic fire sprinklers are not required by the most currently adopted Building Code and when the structure meets each of the following criteria, fire sprinklers will not be required.

- a. The structure shall not exceed 10,000 square feet.
- b. The entire covered area is open on all sides void of interior walls or full length partitions.
- c. Setbacks from property lines or other structures are in accordance with the International Building Code.
- d. The building use is not classified as hazardous or assembly occupancy.
- e. Portable fire extinguishers shall be provided in accordance with NFPA 10.
- f. Open flames and devices emitting flames or creating a glow capable of igniting combustible materials shall not be used in or adjacent to the structure.
- g. Flammable or combustible liquids and LP-Gas shall not be stored in or adjacent to the structure except for automobile fueling islands.
- h. An approved water supply capable of supplying the required fire flow shall be provided.

NOTE: Any changes to the canopy structure or its use may result in the loss of this exception and may require a retrofit of an automatic fire sprinkler system.

(This exemption first appeared in a mid cycle upgrade to the 1991 fire code. At that time it was for a maximum of 5,000 square feet. This exemption is only valid if the proposed use would not require automatic fire protection by the adopted Building Code.)

B. Retrofit of fire sprinklers to existing structures. An existing building that undergoes a “change of occupancy” as outlined in Chapter 4.5.7 whereby that new occupancy is deemed a greater hazard than the previous occupancy, the building will be treated as a new building and may require the installation of fire sprinklers.

C. Any building, except Group U and R-3 occupancies, which undergoes a renovation in excess of 50% of value as assessed by the building code, shall meet the requirements of this section.

D. Any building that increases in size by a total summation of 50% as a result of one or more expansions will require a retrofit of an automatic fire sprinkler. For the purposes of this code, the current size of the building at the time of this code adoption will constitute the starting

point.

(The spirit and intent of this code is not to retrofit all existing buildings. This amendment was designed to only require a retrofit when the extent of remodel or expansion is significant. The “in excess of 50%” clause is a fair measure. What is new to this code is the accounting for accumulated expansion. Should a building add square footage through one or more expansions over the years, which add up to 50% of the buildings original size, fire sprinklers will be required to be installed throughout the entire structure. It was decided to use the date of this code adoption as a starting point for the summation of expansion.)

Chapter 14, Means of Egress, No changes.

Chapter 15, Planned Building Groups, No changes

Chapter 16, Safeguards during construction, No changes

Chapter 17, Wildland Urban Interface, No changes

Chapter 18 Occupancy Fire Safety.

18.2.2.2.1.3 Location of Access Road in Reference to Structures. is hereby added to read:

When required, the apparatus access road shall be located no closer than fifty (50) feet from any structure unless authorized by the chief.

(The location of Emergency access roads and their proximity to the buildings, which they serve, is not specifically detailed in any model code. Common sense tells us that an access roadway needs to be far enough away from a building to allow apparatus to be strategically deployed in the event of a fire. This addition provides a more detailed requirement for the proximity of the roads to the buildings they serve.)

Chapter 19, Combustible Waste Refuse, No change

Chapter 20, Occupancy Fire Safety, No change

Chapter 21, Airports and Heliports, No change

Chapter 22, Automobile Wrecking Yards, No change

Chapter 23, Cleanrooms, No change

Chapter 24, Dry Cleaning, No change

Chapter 25, Grandstands, No change

Chapter 26, Laboratories Using Chemicals, No change

Chapter 27, Manufactured Home and Recreational Vehicle Sites, No change

Chapter 28, Marinas and Boat Yards, No change

Chapter 29, Parking Garages, No change

Chapter 30, Motor fuel Dispensing, No change

Chapter 31, Forest Products, No change

Chapters 32, 33, 34, 35, 36, 37, 38, 39 are listed as Reserved.

Chapter 40, Dust Explosion Prevention, No change

Chapter 41, Hot Work Operations, No change
Chapter 42, Refueling, No change
Chapter 43, Spraying, Dipping, and Coating using Flammable Materials, No change
Chapter 44, Solvent Extraction, No change
Chapter 45, 46, 47, 48, 49 are listed as Reserved.
Chapter 50, Commercial Cooking Equipment, No change
Chapter 51, Industrial Ovens and Furnaces, No change
Chapter 52, Stationary Lead-Acid Battery Systems, No change
Chapter 53, Mechanical Refrigeration, No change
Chapters 54, 55, 56, 57, 58, 59, are listed as Reserved.
Chapter 60, Hazardous Materials, No change
Chapter 61, Aerosol Products, No change
Chapter 62, Combustible Fibers, No change
Chapter 63, Combustible Solids and Liquids, No change
Chapter 64, Corrosive Solids and Liquids, No change
Chapter 65, Explosives, No change

Chapter 66 Flammable Combustible Liquids.

66.2.2 Design and Construction of Tanks. is hereby amended by addition of the following paragraph:

Any permanent tank installation over 500 gallons will require that the foundation and anchorage be engineered by a design professional registered in the State of Arizona.

(This language was added to the ordinance after discussion with the local distributes during the last code review. It was their consensus, after realizing the magnitude of our areas earthquake potential, to require the involvement of a registrant in the setting of tanks. This requirement is typical for a community in an earth quake potential zone.)

Chapter 67, Flammable Solids, No change
Chapter 68, Highly Toxic and Toxic Solids and Liquids, No change

Chapter 69 Liquefied Petroleum Gas (LPG).

69.1 General Provisions Liquefied Petroleum Gas (LPG). is hereby amended by addition of the following paragraph:

Any permanent tank installation over 500 gallons will require that the foundation and anchorage be engineered by a design professional registered in the State of Arizona.

(This language has been added to the ordinance because it is our consensus, after realizing the magnitude of our areas earthquake potential, to require the involvement of a registrant in the

setting of tanks. This requirement is typical for a community in an earth quake potential zone.)

69.4.2.1 Transfer Personnel. is hereby amended to read as follows:

Dispensing of LP gases shall be performed by a qualified attendant. In-service training for attendants shall be conducted annually and current records of such training be maintained on-site.

(The code only states that the attendant be qualified, it requires no proof of training. Most documented incidents involving the filling of LP tanks have been attributed to attendant error in not recognizing faulty equipment.)

Chapter 70, Oxidizers and Organic Peroxides, No change
Chapter 71, Pyrophoric Solids and Liquids, No change
Chapter 72, Unstable Solids and Liquids, No change
Chapter 73, Water-Reactive Solids and Liquids, No change

SECTION 3: That the Somerton City Code, Section 7-1-2-E be amended to read as follows:

Section 7-1-1-E Rules and Regulations

- E. Whenever the terms “Administrative Authority”, “Building Official”, “Chief” or “Administrator” are used in the most currently adopted Building Codes, they shall mean the Director of the Department of Building Safety of the City of Somerton or his representative. The exception to this shall be in matters regarding Fire Prevention and enforcement of the most currently adopted Fire Codes, for which these terms shall apply to the Fire Chief or his representatives.

SECTION 4: That the Somerton City Code, Section 4-2-4 be amended to read as follows:

Section 4-2-4 Appointment, Powers and Duties of Chief:

The chief of the Fire Department as a Department Head shall be appointed by the Manager and concurred in by the Council. The duties of the Fire Chief shall be as indicated in the appropriate job description. These duties are too include the duty to enforce the most current Fire Codes adopted by the City of Somerton.

Article 4-3 ADOPTION OF THE UNIFORM FIRE CODE:

That certain code entitled “NFPA 1, Uniform Fire Code, 2003 Edition”, be hereby adopted as the “Fire Prevention Code of the City of Somerton” and made a part of this chapter the same as though said code was specifically set forth and amended herein; and, at least one (1) copy of said

code shall be filed at the Fire Department's main station of operation and kept available for public use and inspection.