

Chapter 38 - FIRE PREVENTION AND PROTECTION

Footnotes:

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State Law reference— Authority of city to establish fire department, V.T.C.A., Local Government Code §§ 341.003, 342.011; appointment of fire protection personnel, V.T.C.A., Government Code § 410.032; firefighter qualifications and training, V.T.C.A., Government Code § 419.032; fire escapes, V.T.C.A., Health and Safety Code § 791.001 et seq.; flammable liquids, V.T.C.A., Health and Safety Code § 753.001 et seq.; fire safety, V.T.C.A., Health and Safety Code § 791.001 et seq.; fire alarms, V.A.T.S., Insurance Code, § 6002.001 et seq.; fire codes, V.T.C.A., Local Government Code § 235.001 et seq.; fires and fire protection, V.T.C.A., Local Government Code § 351.001 et seq.; regulation of fireworks, V.T.C.A., Local Government Code § 240.904; arson investigation, V.T.C.A., Local Government Code § 352.015 et seq.; controlled burning, V.T.C.A., Penal Code § 28.01(6).

Article I. Replace Article I with the following:

ARTICLE I. - IN GENERAL

Sec. 38-1. - Arson reward.

- a. The city hereby offers a reward of \$250.00 for information leading to the arrest and conviction of any person committing the crime of arson within the corporate limits of the city.
- b. This reward is a standing offer, and shall be paid out of the general fund of the city.

State Law reference— Arson, V.T.C.A., Penal Code § 28.02.

Secs. 38-2—38-31. - Reserved.

Article II. Replace Article II with the following:

ARTICLE II – FIRE MARSHAL

Sec. 38-26 – Appointment of Fire Marshal

The fire marshal shall be appointed by the Fire Chief. The appointment shall be in accordance with the methods permitted by the City and civil service laws.

Sec 38-28 – Appointment of Peace Officers

- a. The San Marcos Fire Department may function as a law enforcement agency, if approved as a law enforcement agency by the Texas Commission on Law Enforcement (TCOLE).
- b. The fire marshal shall be the TCOLE agency administrator for San Marcos Fire Department. In the event the fire marshal is not a sworn Texas Peace Officer, the Fire Chief may appoint a current fire department employee, who is a sworn peace officer, to be the agency administrator for TCOLE purposes.
- c. The fire marshal, with approval of the fire chief, may appoint licensed peace officers to perform law enforcement duties related to the responsibilities of the fire department and other state mandated law enforcement activities required by law.

Sec 38-030. Replace Sec. 38-030 with the following:

Sec 38-030 – Investigation of fire. The fire marshal, or their designee, shall investigate all fires as required by departmental policy, local ordinance, or state law.

Sec 38-031. Replace Sec. 38-031 with the following:

Sec 38-031 – Fire Prevention and Safety Education. The fire marshal, or their designee, may develop educational programs and disseminate materials necessary to educate the public effectively regarding methods of fire prevention and safety.

ARTICLE III. - FIRE CODE STANDARDS

Footnotes:

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State Law reference— Fire codes, V.T.C.A., Local Government Code § 235.001 et seq.

Sec. 38-32. - Code adopted.

- a. The International Fire Code 2015 to include appendices B, D, E, F and G and references thereto, are hereby adopted and incorporated by reference as the fire code of the city, subject to and including by reference such revisions, corrections, additions and deletions as shall appear in this article. In the interpretation and application, the provision of this article shall be held to be minimum requirements adopted for the promotion of public health, safety, morale and general welfare. A copy of the fire code is on file in the city fire marshal's office and the city secretary's office.
- b. In the event there is a conflict between this article and the adopted codes herein and any city, state or federal law, the more restrictive requirements shall govern unless the less restrictive requirements are preemptive under state or federal law.
- c. A violation of this chapter is a strict liability offense, and requires no culpable mental state.

Sec. 18-33. - Amendments to adopted code.

The following sections, paragraphs, and sentences of the International Fire Code, 2015 edition are hereby amended as follows:

Section 101.1; insert: [NAME OF JURISDICTION]

101.1 Title. These regulations shall be known as the Fire Code of the City of San Marcos, hereinafter referred to as "this code."

Section 102.6. add Section 102.6.1 to read as follows:

102.6.1 Historical Portions of Building. The exemptions provided by 102.6 shall apply only to the portion of the building designated as historical or comply with section 1103.1.1 whichever is more restrictive.

Section 103.2 is amended to read as follows:

103.2 Appointment. The fire code official shall be appointed in accordance with the prescribed procedures of this jurisdiction.

Section 105.7; add Section 105.7.19 to read as follows:

105.7.19 Electronic access control systems. Construction permits are required for the installation or modification of an electronic access control system, as specified in Chapter 10. A separate construction permit is required for the installation or modification of a fire alarm system that may be connected to the access control system. Maintenance performed in accordance with this code is not considered a modification and does not require a permit.

Section 109.4; insert: [OFFENSE, DOLLAR AMOUNT, NUMBER OF DAYS]

109.4 Violation penalties. Persons who shall violate a provision of this code or shall fail to comply with any of the requirements thereof or who shall erect, install, alter, repair or do work in violation of the approved construction documents or directive of the fire code official, or of a permit or certificate used under provisions of this code, shall be guilty of a Class C Offense, punishable by a fine of not more than \$2,000 dollars or by imprisonment not exceeding 180 days, or both such fine and imprisonment. Each day that a violation continues after due notice has been served shall be deemed a separate offense.

Section 111.4; insert: [DOLLAR AMOUNT IN TWO LOCATIONS]

111.4 Failure to comply. Any person who shall continue any work after having been served with a stop work order, except such work as that person is directed to perform to remove a violation or unsafe condition, shall be liable to a fine of not less than \$0.00 dollars or more than \$2,000 dollars.

Section 202; amend and/or add definitions as follows:

AMBULATORY CARE FACILITY. Buildings or portions thereof used to provide medical, surgical, psychiatric, nursing, or similar care on a less than 24-hour basis to persons who are rendered incapable of self-preservation by the services provided. This group may include but not be limited to the following:

- Dialysis centers
- Procedures involving sedation
- Sedation dentistry
- Surgery centers
- Colonic centers
- Psychiatric centers

DEFEND IN PLACE. A method of emergency response that engages building components and trained staff to provide occupant safety during an emergency. Emergency response involves remaining in place, relocating within the building, or both, without evacuating the building.

FIRE WATCH. A temporary measure intended to ensure continuous and systematic surveillance of a building or portion thereof by one or more qualified individuals or standby personnel when required by the fire code official, for the purposes of identifying and controlling fire hazards, detecting early signs of unwanted fire, raising an alarm of fire and notifying the fire department.

HIGH-PILED COMBUSTIBLE STORAGE. Add a second paragraph to read as follows:
Any building classified as a group S Occupancy or Speculative Building exceeding 12,000 sq. ft. that has a clear height in excess of 14 feet, making it possible to be used for storage in excess of 12 feet, shall be considered to be high-piled storage. When a specific product cannot be

identified, a fire protection system and life safety features shall be installed as for Class IV commodities, to the maximum pile height.

HIGH-RISE BUILDING. A building with an occupied floor located more than 55 feet (16 764 mm) above the lowest level of fire department vehicle access.

REPAIR GARAGE. A building, structure or portion thereof used for servicing or repairing motor vehicles. This occupancy shall also include garages involved in minor repair, modification and servicing of motor vehicles for items such as lube changes, inspections, windshield repair or replacement, shocks, minor part replacement, and other such minor repairs.

SELF-SERVICE STORAGE FACILITY. Real property designed and used for the purpose of renting or leasing individual storage spaces to customers for the purpose of storing and removing personal property on a self-service basis.

STANDBY PERSONNEL. Qualified fire service personnel, approved by the Fire Code Official. When utilized, the number required shall be as directed by the Fire Code Official. Charges for utilization shall be as normally calculated by the jurisdiction.

UPGRADED OR REPLACED FIRE ALARM SYSTEM. A fire alarm system that is upgraded or replaced includes, but is not limited to the following:

- Replacing one single board or fire alarm control unit component with a newer model
- Installing a new fire alarm control unit in addition to or in place of an existing one
- Conversion from a horn system to an emergency voice/alarm communication system
- Conversion from a conventional system to one that utilizes addressable or analog devices

The following are not considered an upgrade or replacement:

- Firmware updates
- Software updates
- Replacing boards of the same model with chips utilizing the same or newer firmware

Section 307.1 is amended to read as follows:

307.1. General. A person shall not kindle or maintain or authorize to be kindled or maintained any open burning, bonfire, recreational fire, or portable outdoor fireplace, unless conducted and approved in accordance with Sections 307.1.1 through 307.5.

Section 307.2 is amended to read as follows:

307.2. Permit Required. A permit shall be obtained from the fire code official in accordance with 105.6 prior to kindling a fire for recognized silvicultural or range or wildlife management practices, prevention or control of disease or pests. Application for such approval shall only be presented by and permits issued to the owner of the land upon which the fire is to be kindled.

Section 307.4.1 is DELETED

Section 307.4.2 is DELETED

Section 307.4.3 is amended to read as follows:

307.4.1 Portable outdoor fireplaces. Portable outdoor fireplaces shall be used in accordance with the manufacturer's instructions and shall not be operated within 15 feet of a structure or combustible material.

Exception: Portable outdoor fireplaces used at one- and two-family dwellings.

Section 307.4.2. add Section 307.4.2 to read as follows:

307.4.2 Trench burns. Trench burns shall be conducted in air curtain trenches and in accordance with Section 307.2.

Section 308.1.4 is amended to read as follows:

308.1.4. Outdoor cooking. Charcoal burners, open flame cooking appliances, LP gas burners, outdoor grills, barbecue grills, or any other outdoor cooking appliance that generates sufficient heat to cook in, on, or about the appliance, shall not be operated or stored on balconies or within 15 feet of a structure or combustible material.

Exceptions:

1. One- and two-family dwellings
2. Delete
3. Delete

Section 308.1.6.2, Exception #3; change to read as follows:

Exceptions:

3. Torches or flame-producing devices in accordance with Section 308.1.3.

Section 503.1.1; add sentence to read as follows:

Except for one- or two-family dwellings, the path of measurement shall be along a minimum of a ten feet (10') wide unobstructed pathway around the external walls of the structure, unless otherwise approved by the Fire Code Official.

Section 503.2.1; change to read as follows:

503.2.1 Dimensions. Fire apparatus access roads shall have an unobstructed width of not less than 24 feet (7315 mm), exclusive of shoulders, except for approved security gates in accordance with Section 503.6, and an unobstructed vertical clearance of not less than 14 feet (4267 mm).

Exception:

1. When approved by the Fire Code Official, vertical clearance may be reduced; provided such reduction does not impair access by fire apparatus and approved signs are installed and maintained indicating the established vertical clearance.

Section 503.2.3; change Section 503.2.3 to read as follows:

503.2.3 Surface. Fire apparatus access roads shall be designed in accordance with the City of San Marcos Engineering Standards and maintained to support the imposed loads of fire apparatus and shall be surfaced so as to provide all-weather driving capabilities.

Section 503.2.4; change to read as follows:

Section 503.2.4; change Section 503.2.4 to read as follows:

503.2.4 Turning radius. The required turning radius of a fire apparatus access road shall be in accordance with:

1. For buildings less than 30-feet and less than 3 stories in height:
 - a. 20-feet (inside) for turns less than or equal to 90 degrees
 - b. 25-feet (inside) for turns greater than 90 degrees
2. For buildings 30-feet or more and/or 3 or more stories in height minimum interior turning radius of 30 feet.

For purposes of this section, the building height is measured from the lowest finished grade of the fire access roads to the point of accessible roof level, including parapet walls. For buildings with pitched roofs, the height is measured to the roof plate.

Section 503.3; change to read as follows:

503.3 Marking. Striping, signs, or other markings, when approved by the fire code official, shall be provided for fire apparatus access roads to identify such roads or prohibit the obstruction thereof. Striping, signs and other markings shall be maintained in a clean and legible condition at all times and be replaced or repaired when necessary to provide adequate visibility.

Examples of acceptable markings:

1. Striping - Fire apparatus access roads shall be continuously marked by painted lines of red traffic paint six inches (6") in width to show the boundaries of the lane. The words "NO PARKING FIRE LANE" or "FIRE LANE NO PARKING" shall appear in four inch (4") white letters at 25 feet intervals on the red border markings along both sides of the fire lanes. Where a curb is available, the striping shall be on the vertical face of the curb.
2. Signs - Signs shall read "NO PARKING FIRE LANE" or "FIRE LANE NO PARKING" and shall be 12" wide and 18" high. Signs shall be painted on a white background with letters and borders in red, using not less than 2" lettering. Signs shall be permanently affixed to a stationary post and the bottom of the sign shall be six feet, six inches (6'6") above finished grade. Signs shall be spaced not more than fifty feet (50') apart along both sides of the fire lane. Signs may be installed on permanent buildings or walls or as approved by the Fire Code Official.

Section 503.6 is amended to read as follows:

503.6. Gates. All gates that obstruct emergency access roads or drives, whether on public or private property, must be permitted by the fire code official and approved by the fire chief. Where gates are installed across fire access roads they shall have an approved means of emergency operation. The gates and the emergency operation shall be maintained operational

at all times. Electric gate operators, where provided, shall be listed in accordance with UL 325. Gates intended for automatic operation shall be designed, constructed and installed to comply with the requirements of ASTM F2200.

Section 505.1; change to read as follows:

505.1 Address Identification. New and existing buildings shall be provided with approved address identification. The address identification shall be legible and placed in a position that is visible from the street or road fronting the property. Address identification characters shall contrast with their background. Address numbers shall be Arabic numbers or alphabetical letters. Numbers shall not be spelled out. Each character shall be not less than 12 inches (304.8 mm) high with a minimum stroke width of ½ inch (12.7 mm). Where required by the fire code official, address numbers shall be provided in additional approved locations to facilitate emergency response. Where access is by means of a private road, buildings do not immediately front a street, and/or the building cannot be viewed from the public way, a monument, pole or other sign with approved 6 inch (152.4 mm) height building numerals or addresses and 4 inch (101.6 mm) height suite/apartment numerals of a color contrasting with the background of the building or other approved means shall be used to identify the structure. Numerals or addresses shall be posted on a minimum 20 inch (508 mm) by 30 inch (762 mm) background on border. Address identification shall be maintained.

Exceptions:

1. R-3 Single Family occupancies shall have approved numerals of a minimum 3 ½ inches (88.9 mm) in height and a color contrasting with the background clearly visible and legible from the street fronting the property and rear alleyway where such alleyway exists.
2. Structures located within the historic district may utilize a minimum of 6 inches (152.4 mm) high numbers as approved by the Fire Code Official.

Section 506.1; change to read as follows:

506.1 Where required. Where access to or within a structure or an area is restricted because of secured openings or where immediate access is necessary for life-saving or fire-fighting purposes, the fire code official is authorized to require one or more key boxes to be installed in approved locations. The key box shall be of an approved type listed in accordance with UL 1037, and shall contain keys to gain necessary access as required by the fire code official. An approved key box shall be provided on the following structures:

1. On new and existing structures:
 - a. At fire sprinkler riser/fire pump rooms, if one is provided, or
 - b. At main entry if equipped with other automatic fire protection system.
2. On all existing commercial structures comprised of multiple tenant spaces: a single approved Key Box may serve multiple occupancies in a single building provided the box is located in an approved location and is adequately sized for the number of keys.

Section 507.1; add a new paragraph to read as follows:

Existing fire hydrants on adjacent properties shall not be considered available unless fire apparatus access roads extend between properties and easements are established to prevent obstruction of such roads. Existing fire hydrants on public streets are allowed to be considered

as available where streets are not provided with median dividers which cannot be crossed by fire fighters pulling hose lines.

Section 507.2.1 is amended to read as follows:

507.2.1 Private fire service mains. Private fire service mains and appurtenances shall be installed in accordance with NFPA 24 and local jurisdiction construction standards.

Section 507.4; change to read as follows:

507.4 Water Supply Test Date and Information. The water supply test used for hydraulic calculation of fire protection systems shall be conducted in accordance with NFPA 291 "Recommended Practice for Fire Flow Testing and Marking of Hydrants" and within one year of sprinkler plan submittal. The fire code official shall be notified prior to the water supply test. Water supply tests shall be witnessed by the fire code official, as required. The exact location of the static/residual hydrant and the flow hydrant shall be indicated on the design drawings. All fire protection plan submittals shall be accompanied by a hard copy of the waterflow test report, or as approved by the fire code official. Reference Section 903.3.5 for additional design requirements.

Section 507.5 is amended to read as follows:

507.5. Fire hydrant systems.

- (a) A fire hydrant is an approved national standard three-way hydrant connected to six-inch or larger water mains.
- (b) A two-way hydrant is not recognized unless it was installed before January 1, 1985 or it was installed in conjunction with nationally approved sprinkler systems.
- (c) Fire hydrants shall conform to the latest version of the AWWA Standard for Dry Barrel Fire Hydrants.
- (d) Fire hydrants shall have one 4.5 inch steamer and two 2.5 inch side connections with National Standard threads. The centerline of the steamer connection shall be a minimum of 18 inches above the ground surface.
- (e) The City of San Marcos Water Department shall have the authority to develop and approve new fire hydrant installation methods and standards consistent with the application of this section.
- (f) Hydrants shall be installed in accordance with local jurisdiction construction standards.

Section 507.5.1.2; add new sections to read as follows:

507.5.1.2 Intersections. Fire hydrants shall be at every street intersection, or as otherwise required by the fire code official.

507.5.1.2.1 Location. Fire hydrants shall be located within 6 feet of the edge of the pavement unless the fire department determines another location is acceptable for fire department use.

Section 507.5.2 is amended by adding the following:

507.2.1 Cost. The cost of maintaining fire hydrants on private property will be the burden of the occupant and/or owner of that property.

Section 507.5 is amended by adding the following:

507.5.7. Marking. The location of all fire hydrants shall be identified with a blue reflective road dot placed near the center of the roadway in front of the hydrant.

Section 508.1.6.12 is amended by adding the following:

- 12.1 Any or all of the above documents will be placed in a wall mounted document box, as prescribed by the fire code official. No documents or other such items, other than those required by the fire code official, will be permitted to be stored in this cabinet.

Section 509.1.2; add new Section 509.1.2 to read as follows:

509.1.2 Sign Requirements. Unless more stringent requirements apply, lettering for signs required by this section shall have a minimum height of 2 inches (50.8 mm) when located inside a building and 6 inches (101.6 mm) when located outside, or as approved by the fire code official. The letters shall be of a color that contrasts with the background.

Section 609.2; change to read as follows:

609.2 Where Required. A Type I hood shall be installed at or above all commercial cooking appliances and domestic cooking appliances used for commercial purposes that produce grease vapors, including but not limited to cooking equipment used in fixed, mobile, or temporary concessions, such as trucks, buses, trailers, pavilions, or any form of roofed enclosure, as required by the fire code official.

Exceptions:

1. Tents, as provided for in Chapter 31.
2. {No change to existing Exception.}

Additionally, fuel gas and power provided for such cooking appliances shall be interlocked with the extinguishing system, as required by Section 904.12.2. Fuel gas containers and piping/hose shall be properly maintained in good working order and in accordance with all applicable regulations.

Section 901.4 change to read as follows:

901.4.7 Wall Mounted Document Box. A wall mounted document box shall be placed in fire sprinkler riser rooms or at any fire alarm control unit. Documents stored in this box shall include building floor plans, alarm plans, sprinkler plans and any other documents required by the fire code official.

Section 901.6.3; add Sections 901.6.3 and 901.6.3.1 to read as follows:

901.6.3 False Alarms and Nuisance Alarms. False alarms and nuisance alarms shall not be given, signaled or transmitted or caused or permitted to be given, signaled or transmitted in any manner.

901.6.3.1 False Alarm and Nuisance Alarm Penalty. The owner or manager of an occupancy in which the fire alarm system signals or transmits more than three false alarms, as the result of

a mechanical, electrical, or component failure within the alarm system, in any rolling 12-month period shall be fined as follows for subsequent false or nuisance alarm beyond the third false or nuisance alarm in the rolling 12-month period:

- a) fourth false or nuisance alarm shall be fined at \$500
- b) fifth false or nuisance alarm shall be fined at \$1,000
- c) sixth and all subsequent false or nuisance alarms shall be fined at \$1,500.

False alarms as the result of weather related activation or false alarms caused by the initiation of the alarm system by the activation of a manual pull station, or the activation by a person(s) tampering with a detection or signaling device or component of the alarm system, shall not be subject to penalty.

Section 903.2.9; add Section 903.2.9.3 to read as follows:

903.2.9.3 Self-Service Storage Facility. An automatic sprinkler system shall be installed throughout all self-service storage facilities.

Exception: One-story self-storage facilities that have no interior corridors.

Section 903.2.10; change to read as follows:

903.2.10 Group S-2 enclosed parking garages. An automatic sprinkler system shall be provided throughout buildings classified as enclosed parking garages in accordance with Section 406.4 of the International Building Code or where located beneath other groups.

Section 903.3.1.2.3; add section to read as follows:

Section 903.3.1.2.3 Attics and Attached Garages. Sprinkler protection is required in attic spaces of such buildings three or more stories in height, in accordance with NFPA 13 and or NFPA 13R requirements, and attached garages.

Section 903.3.1.2.4; add section to read as follows:

Section 903.3.1.2.4 Exterior closets. Sprinkler protection shall be provided in closets (regardless of size) that are accessible from the exterior of the building.

Section 903.3.1.4; add to read as follows:

903.3.1.4 Freeze protection. Freeze protection systems for automatic fire sprinkler systems shall be in accordance with the requirements of the applicable referenced NFPA standard and this section.

903.3.1.4.1 Attics. Only dry-pipe, preaction, or listed antifreeze automatic fire sprinkler systems shall be allowed to protect attic spaces.

Exception: Wet-pipe fire sprinkler systems shall be allowed to protect non-ventilated attic spaces where:

1. The attic sprinklers are supplied by a separate floor control valve assembly to allow ease of draining the attic system without impairing sprinklers throughout the rest of the building, and

2. Adequate heat shall be provided for freeze protection as per the applicable referenced NFPA standard, and
3. The attic space is a part of the building's thermal, or heat, envelope, such that insulation is provided at the roof deck, rather than at the ceiling level.

Section 903.3.5; add a second paragraph to read as follows:

Water supply as required for such systems shall be provided in conformance with the supply requirements of the respective standards; however, every water-based fire protection system shall be designed with a 5 psi safety factor. Reference Section 507.4 for additional design requirements.

Section 903.4; add a second paragraph after the exceptions to read as follows:

Sprinkler and standpipe system water-flow detectors shall be provided for each floor tap to the sprinkler system and shall cause an alarm upon detection of water flow for more than 45 seconds. All control valves in the sprinkler and standpipe systems except for fire department hose connection valves shall be electrically supervised to initiate a supervisory signal at the central station upon tampering.

Section 903.4.2; add second paragraph to read as follows:

The alarm device required on the exterior of the building shall be a weatherproof horn/strobe notification appliance with a minimum 75 candela strobe rating, installed as close as practicable to the fire department connection.

Section 905.2; change to read as follows:

905.2 Installation Standard. Standpipe systems shall be installed in accordance with this section and NFPA 14. Manual dry standpipe systems shall be supervised with a minimum of 10 psig and a maximum of 40 psig air pressure with a high/low alarm.

Section 905.3; add Section 905.3.9 and exception to read as follows:

905.3.9 Buildings Exceeding 10,000 sq. ft. In buildings exceeding 10,000 square feet in area per story and where any portion of the building's interior area is more than 200 feet (60960 mm) of travel, vertically and horizontally, from the nearest point of fire department vehicle access, Class I automatic wet or manual wet standpipes shall be provided.

Exceptions:

1. Automatic dry and semi-automatic dry standpipes are allowed as provided for in NFPA 14.
2. R-2 occupancies of four stories or less in height having no interior corridors.

Section 905.4, change Item 1, 3, and 5, and add Item 7 to read as follows:

1. In every required exit stairway, a hose connection shall be provided for each story above and below grade plane. Hose connections shall be located at an intermediate landing between stories, unless otherwise approved by the fire code official.
2. {No change.}

3. In every exit passageway, at the entrance from the exit passageway to other areas of a building.

Exception: Where floor areas adjacent to an exit passageway are reachable from an exit stairway hose connection by a {No change to rest.}

4. {No change.}
5. Where the roof has a slope less than four units vertical in 12 units horizontal (33.3-percent slope), each standpipe shall be provided with a two-way hose connection located to serve the roof or at the highest landing of an exit stairway with stair access to the roof provided in accordance with Section 1011.12.
6. {No change.}
7. When required by this Chapter, standpipe connections shall be placed at two hundred feet (200') intervals along major corridors thereafter, or as otherwise approved by the fire code official.

Section 905.9; add a second paragraph after the exceptions to read as follows:

Sprinkler and standpipe system water-flow detectors shall be provided for each floor tap to the sprinkler system and shall cause an alarm upon detection of water flow for more than 45 seconds. All control valves in the sprinkler and standpipe systems except for fire department hose connection valves shall be electrically supervised to initiate a supervisory signal at the central station upon tampering.

Section 906.1 is amended by deleting the exception.

Section 907.1; add Section 907.1.4 to read as follows:

907.1.4 Design Standards. Where a new fire alarm system is installed, the devices shall be addressable. Fire alarm systems utilizing more than 20 smoke detectors shall have analog initiating devices.

Section 907.2.1; change to read as follows:

907.2.1 Group A. A manual fire alarm system that activates the occupant notification system in accordance with Section 907.5 shall be installed in Group A occupancies having an occupant load of 300 or more persons or more than 100 persons above or below the lowest level of exit discharge. Group A occupancies not separated from one another in accordance with Section 707.3.10 of the International Building Code shall be considered as a single occupancy for the purposes of applying this section. Portions of Group E occupancies occupied for assembly purposes shall be provided with a fire alarm system as required for the Group E occupancy.

Exception: {No change.}

Activation of fire alarm notification appliances shall:

1. Cause illumination of the means of egress with light of not less than 1 foot-candle (11 lux) at the walking surface level, and
2. Stop any conflicting or confusing sounds and visual distractions.

Section 907.2.3; change to read as follows:

907.2.3. Group E. A manual fire alarm system that initiates the occupant notification signal utilizing an emergency voice/alarm communication system meeting the requirements of Section 907.5.2.2 and installed in accordance with Section 907.6 shall be installed in Group E educational occupancies. When automatic sprinkler systems or smoke detectors are installed, such systems or detectors shall be connected to the building fire alarm system. An approved smoke detection system shall be installed in Group E day care occupancies. Unless separated by a minimum of 100' open space, all buildings, whether portable buildings or the main building, will be considered one building for alarm occupant load consideration and interconnection of alarm systems.

Exceptions:

1. {No change.}
 - 1.1. Residential In-Home day care with not more than 12 children may use interconnected single station detectors in all habitable rooms. (For care of more than five children 2 1/2 or less years of age, see Section 907.2.6.) {No change to remainder of exceptions.}

Section 907.2.13, Exception 3; change to read as follows:

3. Open air portions of buildings with an occupancy in Group A-5 in accordance with Section 303.1 of the International Building Code; however, this exception does not apply to accessory uses including but not limited to sky boxes, restaurants, and similarly enclosed areas.

Section 907.4.2; add Section 907.4.2.7 to read as follows:

907.4.2.7 Type. Manual alarm initiating devices shall be an approved double action type.

Section 907.6.1; add Section 907.6.1.1 to read as follows:

907.6.1.1 Wiring Installation. All fire alarm systems shall be installed in such a manner that a failure of any single initiating device or single open in an initiating circuit conductor will not interfere with the normal operation of other such devices. All signaling line circuits (SLC) shall be installed in such a way that a single open will not interfere with the operation of any addressable devices (Class A). Outgoing and return SLC conductors shall be installed in accordance with NFPA 72 requirements for Class A circuits and shall have a minimum of four feet separation horizontal and one foot vertical between supply and return circuit conductors. The initiating device circuit (IDC) from a signaling line circuit interface device may be wired Class B, provided the distance from the interface device to the initiating device is ten feet or less.

Section 907.6.3; delete all four Exceptions.

Section 909.22; add to read as follows:

909.22 Stairway or Ramp Pressurization Alternative. Where the building is equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 and the stair pressurization alternative is chosen for compliance with Building Code requirements for a smokeproof enclosure, interior exit stairways or ramps shall be pressurized to a minimum of

0.10 inches of water (25 Pa) and a maximum of 0.35 inches of water (87 Pa) in the shaft relative to the building measured with all interior exit stairway and ramp doors closed under maximum anticipated conditions of stack effect and wind effect. Such systems shall comply with Section 909, including the installation of a separate fire-fighter's smoke control panel as per Section 909.16, and a Smoke Control Permit shall be required from the fire department as per Section 105.7.

909.22.1 Ventilating equipment. The activation of ventilating equipment for the stair or ramp pressurization system shall be by smoke detectors installed at each floor level at an approved location at the entrance to the smokeproof enclosure. When the closing device for the stairway or ramp shaft and vestibule doors is activated by smoke detection or power failure, the mechanical equipment shall activate and operate at the required performance levels. Smoke detectors shall be installed in accordance with Section 907.3.

909.22.1.1 Ventilation Systems. Smokeproof enclosure ventilation systems shall be independent of other building ventilation systems. The equipment, control wiring, power wiring and ductwork shall comply with one of the following:

1. Equipment, control wiring, power wiring and ductwork shall be located exterior to the building and directly connected to the smokeproof enclosure or connected to the smokeproof enclosure by ductwork enclosed by not less than 2-hour fire barriers constructed in accordance with Section 707 of the Building Code or horizontal assemblies constructed in accordance with Section 711 of the Building Code, or both.
2. Equipment, control wiring, power wiring and ductwork shall be located within the smokeproof enclosure with intake or exhaust directly from and to the outside or through ductwork enclosed by not less than 2-hour barriers constructed in accordance with Section 707 of the Building Code or horizontal assemblies constructed in accordance with Section 711 of the Building Code, or both.
3. Equipment, control wiring, power wiring and ductwork shall be located within the building if separated from the remainder of the building, including other mechanical equipment, by not less than 2-hour fire barriers constructed in accordance with Section 707 of the Building Code or horizontal assemblies constructed in accordance with Section 711 of the Building Code, or both.

Exceptions:

1. Control wiring and power wiring utilizing a 2-hour rated cable or cable system.
2. Where encased with not less than 2 inches (51 mm) of concrete.
3. Control wiring and power wiring protected by a listed electrical circuit protective system with a fire-resistance rating of not less than 2 hours.

909.22.1.2 Standby Power. Mechanical vestibule and stairway and ramp shaft ventilation systems and automatic fire detection systems shall be provided with standby power in accordance with Section 2702 of the Building Code.

909.22.1.3 Acceptance and Testing. Before the mechanical equipment is approved, the system shall be tested in the presence of the fire code official to confirm that the system is operating in compliance with these requirements.

Section 910.2; change Exception 2 and 3 to read as follows:

2. Only manual smoke and heat removal shall be required in areas of buildings equipped with early suppression fast-response (ESFR) sprinklers. Automatic smoke and heat removal is prohibited.

3. Only manual smoke and heat removal shall be required in areas of buildings equipped with control mode special application sprinklers with a response time index of $50(m^*S)^{1/2}$ or less that are listed to control a fire in stored commodities with 12 or fewer sprinklers. Automatic smoke and heat removal is prohibited.

Section 910.2; add subsections 910.2.3 with exceptions to read as follows:

910.2.3 Group H. Buildings and portions thereof used as a Group H occupancy as follows:

1. In occupancies classified as Group H-2 or H-3, any of which are more than 15,000 square feet (1394 m²) in single floor area.

Exception: Buildings of noncombustible construction containing only noncombustible materials.

2. In areas of buildings in Group H used for storing Class 2, 3, and 4 liquid and solid oxidizers, Class 1 and unclassified detonable organic peroxides, Class 3 and 4 unstable (reactive) materials, or Class 2 or 3 water-reactive materials as required for a high-hazard commodity classification.

Exception: Buildings of noncombustible construction containing only noncombustible materials.

Section 910.3; add section 910.3.4 to read as follows:

910.3.4 Vent Operation. Smoke and heat vents shall be capable of being operated by approved automatic and manual means. Automatic operation of smoke and heat vents shall conform to the provisions of Sections 910.3.2.1 through 910.3.2.3.

910.3.4.1 Sprinklered buildings. Where installed in buildings equipped with an approved automatic sprinkler system, smoke and heat vents shall be designed to operate automatically. The automatic operating mechanism of the smoke and heat vents shall operate at a temperature rating at least 100 degrees F (approximately 38 degrees Celsius) greater than the temperature rating of the sprinklers installed.

Exception: Manual only systems per Section 910.2.

910.3.4.2 Nonsprinklered Buildings. Where installed in buildings not equipped with an approved automatic sprinkler system, smoke and heat vents shall operate automatically by actuation of a heat-responsive device rated at between 100°F (56°C) and 220°F (122°C) above ambient.

Exception: Listed gravity-operated drop out vents.

Section 912.2; add Section 912.2.3 to read as follows:

912.2.3 Hydrant Distance. An approved fire hydrant shall be located within 100 feet of the fire department connection as the fire hose lays along an unobstructed path.

Section 912.4.1; change to read as follows:

912.4.1 Locking fire department connection caps. Approved, locking caps shall be installed on any fire department connection that is installed as a result of new construction. Additionally, where remodeling of a building or structure requires the addition of an approved sprinkler or standpipe system, locking caps shall be installed. Where fire department connections exist on current buildings but the caps are missing or damaged, they must be replaced with locking caps, as approved by the fire code official.

Section 913.1; add second paragraph and exception to read as follows:

When located on the ground level at an exterior wall, the fire pump room shall be provided with an exterior fire department access door that is not less than 3 ft. in width and 6 ft. - 8 in. in height, regardless of any interior doors that are provided. A key box shall be provided at this door, as required by Section 506.1.

Exception: When it is necessary to locate the fire pump room on other levels or not at an exterior wall, the corridor leading to the fire pump room access from the exterior of the building shall be provided with equivalent fire resistance as that required for the pump room, or as approved by the fire code official. Access keys shall be provided in the key box as required by Section 506.1.

Section 1010.1.9.4 Bolt Locks; change Exceptions 3 and 4 to read as follows:

Exceptions:

3. Where a pair of doors serves an occupant load of less than 50 persons in a Group B, F, M or S occupancy. {Remainder unchanged}
4. Where a pair of doors serves a Group A, B, F, M or S occupancy. {Remainder unchanged}

Section 1015.8 Window Openings; change number 1 to read as follows:

1. Operable windows where the top of the sill of the opening is located more than 55 feet (16 764 mm) above the finished grade or other surface below and that are provided with window fall prevention devices that comply with ASTM F 2006.

Section 1031.2; change to read as follows:

1031.2 Reliability. Required exit accesses, exits and exit discharges shall be continuously maintained free from obstructions or impediments to full instant use in the case of fire or other emergency. An exit or exit passageway shall not be used for any purpose that interferes with a means of egress.

Section 1103.7; add Section 1103.7.8 and 1103.7.8.1 to read as follows:

1103.7.8 Fire Alarm System Design Standards. Where an existing fire alarm system is upgraded or replaced, the devices shall be addressable. Fire alarm systems utilizing more than 20 smoke and/or heat detectors shall have analog initiating devices.

Exception: Existing systems need not comply unless the total building, or fire alarm system, remodel or expansion exceeds 30% of the building. When cumulative building, or fire alarm system, remodel or expansion initiated after the date of original fire alarm

panel installation exceeds 50% of the building, or fire alarm system, the fire alarm system must comply within 18 months of permit application.

1103.7.8.1 Communication requirements. Refer to Section 907.6.6 for applicable requirements.

Table 3206.2, footnote j; change text to read as follows:

j. Where storage areas are protected by either early suppression fast response (ESFR) sprinkler systems or control mode special application sprinklers with a response time index of 50 (m • s) ¹/₂ or less that are listed to control a fire in the stored commodities with 12 or fewer sprinklers, installed in accordance with NFPA 13, manual smoke and heat vents or manually activated engineered mechanical smoke exhaust systems shall be required within these areas.

Section 3310.3, add Section 3310.3:

3310.3 Fencing. Where construction or demolition sites have fencing or some other type of security barrier installed around the site, an approved padlock shall be installed on no less than one gate. Approved padlocks may be required by the fire code official on additional gates. These padlocks shall be purchased by the property owner or contractor but shall be keyed, as directed, by the fire code official.

Section 5601.1.3; add second paragraph and exception to read as follows:

The possession, manufacture, storage, handling and use of fireworks are prohibited outside the city limits for a distance of five thousand (5,000) feet, provided that the territory encompassed within the five thousand (5,000) feet outside the city limits is not within the extraterritorial jurisdiction of another municipality. A violation of this ordinance is declared to be a common and public nuisance. The owner, lessee or occupant of the property or structure where fireworks are being stored or used shall be deemed responsible for violation of this section.

Exceptions:

5. The possession of fireworks otherwise allowed by State Law.

Section 5703.6; add a sentence to read as follows:

5703.6 Piping Systems. Piping systems, and their component parts, for flammable and combustible liquids shall be in accordance with Sections 5703.6.1 through 5703.6.11. An approved method of secondary containment shall be provided for underground tank and piping systems.

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): [JURISDICTION TO SPECIFY]

5704.2.9.6.1 Locations where above-ground tanks are prohibited. Storage of Class I and II liquids in above-ground tanks outside of buildings is prohibited within the limits established by law as the limits of districts in which such storage is prohibited otherwise by City of San Marcos Ordinance.

Section 5704.2.11.4; add a sentence to read as follows:

5704.2.11.4 Leak Prevention. Leak prevention for underground tanks shall comply with Sections 5704.2.11.4.1 through 5704.2.11.4.3. An approved method of secondary containment shall be provided for underground tank and piping systems.

Section 5704.2.11.4.2; change to read as follows:

5704.2.11.4.2 Leak Detection. Underground storage tank systems shall be provided with an approved method of leak detection from any component of the system that is designed and installed in accordance with NFPA 30 and as specified in Section 5704.2.11.4.3.

Section 5704.2.11.4; add Section 5704.2.11.4.3 to read as follows:

5704.2.11.4.3 Observation Wells. Approved sampling tubes of a minimum 4 inches in diameter shall be installed in the backfill material of each underground flammable or combustible liquid storage tank. The tubes shall extend from a point 12 inches below the average grade of the excavation to ground level and shall be provided with suitable surface access caps. Each tank site shall provide a sampling tube at the corners of the excavation with a minimum of 4 tubes. Sampling tubes shall be placed in the product line excavation within 10 feet of the tank excavation and one every 50 feet routed along product lines towards the dispensers, a minimum of two are required.

Section 5706.2.4.4 (geographic limits in which the storage of Class I and Class II liquids in above-ground tanks is prohibited): [JURISDICTION TO SPECIFY]

5706.2.4.4 Locations where above-ground tanks are prohibited. The storage of Class I and II liquids in above-ground tanks is prohibited within the limits established by law as the limits of districts in which such storage is prohibited otherwise by City of San Marcos Ordinance.

Section 5806.2 (geographic limits in which the storage of flammable cryogenic fluids in stationary containers is prohibited): [JURISDICTION TO SPECIFY]

5806.2 Limitations. Storage of flammable cryogenic fluids in stationary containers outside of buildings is prohibited within the limits established by law as the limits of districts in which such storage is prohibited otherwise by City of San Marcos Ordinance.

Section 6104.2: delete.

Appendix B, Section B103.1; change to read as follows:

B103.1 Decreases. The fire code official is authorized to reduce the fire-flow requirements for isolated buildings or a group of buildings in rural areas or small communities where the development of full fire-flow requirements is impractical.

Appendix B, Section B103.2; change to read as follows:

B103.2 Increases. The fire code official is authorized to increase the fire-flow requirements where conditions indicate an unusual susceptibility to group fires or conflagrations. An increase shall not be more than twice that required for the building under consideration.

Appendix D, Section D102.1; change to read as follows:

D102.1 Access and loading. Facilities, buildings or portions of buildings hereafter constructed shall be accessible to fire department apparatus by way of an approved fire apparatus access road with an approved driving surface capable of supporting the imposed load of fire apparatus weighing at least 75,000 pounds (34 050 kg) in accordance with the City of San Marcos Engineering Standards.

Appendix D, Section D103.1; change to read as follows:

D103.1 Access road width with a hydrant. Where a fire hydrant is located on a fire apparatus access road, the minimum road width shall be 26-feet.

Appendix D, Section D103.2; change to read as follows:

D103.2 Grade. Fire apparatus access roads shall not exceed 10% in grade and not exceed 5% on cross-slope.

Exception: Grades steeper than 10% as approved by the Fire Code Official.

Appendix D, Section D103.3; change to read as follows:

D103.3 Turning radius. The minimum turning radius shall be in accordance with:

1. For buildings less than 30-feet and less than 3 stories in height:
 - a. 20-feet (inside) for turns less than or equal to 90 degrees
 - b. 25-feet (inside) for turns greater than 90 degrees
2. For buildings 30-feet or more and/or 3 or more stories in height minimum interior turning radius of 30 feet.

For purposes of this section, the building height is measured from the lowest finished grade of the fire access roads to the point of accessible roof level, including parapet walls. For buildings with pitched roofs, the height is measured to the roof plate.

Appendix D, Section D103.5; change to read as follows:

D103.5 Fire apparatus access road gates. Gates securing the fire apparatus access roads shall comply with all of the following criteria:

1. Where a single gate is provided, the gate width shall be not less 24 feet. Where a fire apparatus road consists of a divided roadway, the gate width shall be not less than 12 feet (3658 mm).
2. Gates shall be of the swinging or sliding type.
3. Construction of gates shall be of materials that allow manual operation by one person.
4. Gate components shall be maintained in an operative condition at all times and replaced or repaired when defective.
5. Electric gates shall be equipped with a means of opening the gate by fire department personnel for emergency access. Emergency opening devices shall be approved by the fire code official.
6. Methods of locking shall be submitted for approval by fire code official.
7. Electric gate operators, where provided, shall be listed in accordance with UL 325.
8. Gates intended for automatic operation shall be designed, constructed and installed to comply with the requirements of ASTM F 2200.

Appendix D, Section D105.2; change to read as follows:

D105.2 Width. Aerial fire apparatus access roads shall have a minimum unobstructed width of 26 feet.