

RESPONSIBLE MASTER PLUMBER. A person licensed as a master plumber who allows his master plumber license to be used by only one plumbing company for the purposes of offering and performing plumbing work under the person's master plumber license; is authorized to obtain permits for plumbing work; assumes responsibility for plumbing work under the person's license; and has submitted a certificate of insurance as required by Section 1301.3576 of the Plumbing License Law and Section 367.3 of the State Plumbing License Board Rules.

RP DEVICE. See definition of reduced pressure principle backflow preventer.

SAWS. San Antonio Water System (<http://saws.org/>).

SITE WORK. Site work includes any of the following:

- The changing of grade on a site by more than twelve (12) inches (305 mm) vertical from the existing contours through cut or fill operations.
- The removal of trees or the process of grubbing.
- The construction of a commercial driveway and/or surface parking lot.
- The trenching of a site in order to install underground utilities.

SPECIAL INSPECTOR. See definition in section 10-30 of this chapter.

STATE. Texas.

SUBCONTRACTOR. One who performs services under contract to a contractor.

TCEQ. Texas Commission on Environmental Quality (<http://www.tceq.state.tx.us/>).

TDLR. Texas Department of Licensing and Regulation (<http://www.license.state.tx.us/>).

TOPS PERMIT. An electrical permit designed to allow the use of an existing or new electrical distribution and/or service prior to obtaining a certificate of occupancy. Connection to a service also requires the approval of CPS Energy.

TRADESMAN PLUMBER—LIMITED LICENSE. An individual, who has completed at least four thousand (4,000) hours working under the direct supervision of a journeyman or master plumber as a registered plumber's apprentice, who has passed the required examination and fulfilled the other requirements of the state plumbing license board, who constructs and installs plumbing for one- and two-family dwellings under the supervision of the responsible master plumber, and who has not met or attempted to meet the qualifications for a journeyman plumber license.

WORKING DAYS. Days exclusive of federal, state, or local holidays and weekends unless otherwise stated.

Secs. 10-26—10-28. - Reserved.

ARTICLE III. - BUILDING CODE

Sec. 10-29. - Adoption of *International Building Code* (~~2018~~2021).

The ~~2018~~2021 edition of the *International Building Code*, promulgated by the International Code Council, Chapters 2 through 35, and Appendix H is hereby adopted and incorporated in this article by reference as if fully set forth, except as it is amended by the following provisions of section 10-30. Provisions of this article are in addition to the provisions of the *International Building Code*. The following provisions coinciding with the provisions of the *International Building Code* supersede, repeal, or delete, when indicated, the corresponding provisions of the *International Building Code*.

All references within the model codes to any building, electrical, fuel gas, mechanical, plumbing, energy conservation, ~~or existing building~~, or swimming pool code shall be construed to be a reference to the respective building, electrical, fuel gas, mechanical, plumbing, energy conservation, ~~or existing building~~, or swimming pool code specifically adopted by reference in articles II through XIV of this chapter.

Sec. 10-30. - Amendments to the adopted chapters of the *International Building Code* (2018~~2021~~).

Additions to the *International Building Code* are shown as underlined text. Deletions to the *International Building Code* are shown as bracketed ~~[striketroughs]~~.

Chapter 2, DEFINITIONS, is amended for ADOBE CONSTRUCTION, AMBULATORY CARE FACILITY and SPECIAL INSPECTOR to read as follows:

[BS] ADOBE CONSTRUCTION MASONRY. A type of earthen ~~[C]~~ construction in which the ~~[exterior load-bearing and nonload-bearing walls and partitions are of]~~ unfired clay based masonry units are formed without compression. ~~[, and floors, roofs and interior framing are wholly or partly of wood or]~~ May contain sand, aggregates, organic or inorganic binders, stabilizers and other approved materials.

~~—[Adobe, stabilized. Unfired clay masonry units to which admixtures, such as emulsified asphalt, are added during the manufacturing process to limit the units' water absorption so as to increase their durability.]~~

~~[Adobe, unstabilized. Unfired clay masonry units that do not meet the definition of "Adobe, stabilized."]~~

[BG] AMBULATORY CARE FACILITY. Buildings or portions thereof used to provide medical, surgical, psychiatric, nursing, dialysis or similar care on a less than 24-hour basis to persons who are rendered incapable of self-preservation by the services provided or staff has accepted responsibility for care recipients already incapable.

[B] FIRE AREA. The aggregate floor area enclosed and bounded by *fire walls, fire barriers, exterior walls* or *horizontal assemblies* of a building. Areas of the building not provided with surrounding walls shall be included in the fire area if such areas are included within the horizontal projection of the roof or floor next above.

Exception: Outdoor covered areas shall not be considered fire areas nor shall they be considered as part of the fire area of a connected building where all of the following conditions are met:

1. The outdoor covered area is a Group A2 Occupancy less than 1,000 ft² or is a Group A3 Occupancy. If multiple Group A2 Occupancy outdoor covered areas are proposed, then the aggregate area of all of these areas shall be less than 1,000 ft² or separated by a minimum of 20 feet from each other.
2. The outdoor covered area is open on at least three sides and open a minimum of 50% of the perimeter of the area covered. In order to be considered "open" for the purpose of this exception, an open side shall be at least 50% open with the open area uniformly distributed to prevent the accumulation of smoke and toxic gases.
3. The outdoor covered area shall have adequate independent means of egress such that the occupants of the outdoor covered area are not required to egress through a connected or adjacent building.

[BS] SPECIAL INSPECTOR. A qualified person employed or retained by an approved agency who shall prove to the satisfaction of the registered design professional in responsible charge and [approved by] the Building Official that he/she [as having] has the competence necessary to inspect a particular type of construction requiring special inspection.

Chapter 2, *DEFINITIONS*, is amended to add *COMPRESSED EARTH BLOCK*, *EARTHEN CONSTRUCTION* and *RAMMED EARTH* to read as follows:

COMPRESSED EARTH BLOCK or CEB: A type of *earthen construction* in which the *masonry units* are individually formed by means of mechanical compression. May contain stabilizers or other approved materials.

EARTHEN CONSTRUCTION. A type of *masonry construction* in which the *load-bearing and/or non-load bearing* walls are composed primarily of a matrix of inorganic soil materials such as clay, sand and silt that have been mechanically formed and have not been burned or fired in a kiln.

Stabilized. *Earthen construction* to which complimentary stabilizers such as lime or Portland cement are added to the soil matrix to limit water absorption, increase structural stability and increase durability.

Unstabilized. *Earthen construction* that does not meet the definition of “*Stabilized.*”

RAMMED EARTH. A type of *earthen construction* in which monolithic wall panels are formed by mechanically compressing successive lifts of the soil matrix within a temporary formwork. May contain stabilizers or other approved materials.

SECTION 304, *BUSINESS GROUP B*, is amended by adding *Fire Stations* in the group as follows with remaining text to remain as written:

304.1 Business Group B. Business Group B occupancy includes, among others, the use of a building or structure, or a portion thereof, for office, professional or service-type transactions, including storage of records and accounts. Business occupancies shall include, but not be limited to, the following:

Fire stations (including the dormitory, apparatus bays, living and offices areas) if installed with an automatic smoke detection system in accordance with 907.2.10.2 and smoke alarms installed in accordance with 907.2.11.2 through 907.2.11.4.

Section 310.5, *Residential Group R-3*, is amended by adding *Foster Care Family Homes* to the group as follows with remaining text to remain as written:

310.4 Residential Group R-3. Residential ~~Group R-3~~ occupancies where the occupants are primarily permanent in nature and not classified as Group R-1, R-2, R-4 or I, including:

Foster Family Home - A child care facility certified or licensed by the Texas Department of Human services which provides care twenty-four (24) hours a day for not more than six (6) children.

Section [F] 501.2, *Address identification*, is amended to read as follows:

[F] 502.1 Address identification. All existing commercial and industrial buildings issued certificates of occupancy after September 10, 2006 and all new ~~[New and existing]~~ buildings shall be provided with approved address identification ~~[numbers or letters]~~. 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 a minimum of six inches ~~[4 inches (102 mm)]~~ high with a minimum stroke width of ½ inch (12.7mm). For buildings with individual suites, the suite numbers shall be a minimum of four inches high with a minimum stroke width of ½ inch (12.7mm). Where required by the fire code official, address identification shall be provided in additional approved locations to facilitate emergency response. Where access is by means of a private road and the building address cannot be viewed from the public way, a monument, pole or other approved sign or means shall be used to identify the structure. Address numbers shall be maintained.

Section 503.1, General, is amended by adding Section 503.1.5, Outdoor Covered Areas for Group A2 Occupancies, as follows:

503.1.5 Outdoor Covered Areas for Group A2 Occupancies. Where an outdoor covered patio meets ALL of the conditions listed, the covered patio is NOT required to be included in the calculated "building area" of the structure nor does it require any "types of construction separation" or "occupancy separation" to meet the City's Building Code.

1. The outdoor covered area is a Group A2 Occupancy less than 1,000 SF. If multiple covered areas are proposed, then the aggregate area of all of these areas shall be less than 1,000 SF or each additional area shall be separated by a minimum of 20 feet from each other.
2. The outdoor covered area is open on at least three sides and open a minimum of 50 percent of the perimeter of the area covered. In order to be considered "open" for the purpose of the exception, an open side shall be at least 50 percent open with the open area uniformly distributed to prevent the accumulation of smoke and toxic gases.
3. The outdoor covered area shall have adequate independent means of egress such that the occupants of the outdoor covered area are not required to egress through a connected or adjacent building.
4. Outdoor covered areas shall not be built within 10 feet of ~~a property line~~ a property line (real or imaginary).
5. Outdoor covered areas of wood construction shall be built with fire retardant treated wood as per IBC Section 2303.2 or protected with a fire-resistance rated material approved by the City.
6. The calculated occupant load of the outdoor covered area(s) shall contribute to the occupant load of the existing building for calculation of a total occupant load and for determination of the number of required plumbing fixtures per Section 403 of the IPC.

~~Section 703.4, Automatic sprinklers, is repealed in its entirety.~~

Section 706.1.1, Party Walls, Exception 2 is deleted as follows, all other Code text remains as is:

- ~~[2. Party walls and Fire walls are not required on lot lines dividing a building for ownership purposes where the aggregate height and area of the portions of the building located on both sides of the lot line do not exceed the maximum height and area requirements of this code. For the building code official's review and approval, the official he or she shall be provided with copies of dedicated access easements and contractual agreements that permit the owners of portions of the building located on either side of the lot line access to the other side for purposes of maintaining fire and life safety systems necessary for the operation of the building.]~~

Section 901.5, Acceptance tests, is amended as follows:

901.5 Acceptance tests. Fire protection systems shall be tested in accordance with the requirements of this code and the *International Fire Code*. Where required, the tests shall be conducted in the presence of the Building Official ~~[building official]~~. Tests required by this code, the *International Fire Code* and the standards listed in this code shall be conducted at the expense of the owner or the owner's authorized agent. It shall be unlawful to occupy portions of a structure until the required fire protection systems within that portion of the structure have been tested and approved. A representative of the Fire Marshal shall witness all required acceptance tests for all these systems.

Section [F] 901.6.2.1, High-rise buildings, is amended as follows:

[F] 901.6.2.1 High-rise buildings. For high-rise buildings, an integrated testing plan shall be ~~[comply with NFPA 4]~~ approved by the fire code official, with an integrated test performed prior to issuance of the certificate of occupancy and at intervals not exceeding 10 years, unless otherwise specified by an integrated system test plan ~~[prepared in accordance with NFPA 4]~~ approved by the fire code official. If an equipment failure is detected during integrated testing, a repeat of the integrated test shall not be

required, except as necessary to verify operation of fire protection or life safety functions that are initiated by equipment that was repaired or replaced.

Section [F] 901.6.2.2, *Smoke control systems*, is amended as follows:

[F] 901.6.2.2 Smoke control systems. Where a fire alarm system is integrated with a smoke control system as outlined in Section 909, an integrated testing plan shall be approved by the fire code official ~~[comply with NFPA 4]~~, with an integrated test performed prior to issuance of the certificate of occupancy and at intervals not exceeding 10 years, unless otherwise specified by an integrated system test plan ~~[prepared in accordance with NFPA 4]~~ approved by the fire code official. If an equipment failure is detected during integrated testing, a repeat of the integrated test shall not be required, except as necessary to verify operation of fire protection or life safety functions that are initiated by equipment that was repaired or replaced.

SECTION 901, *GENERAL*, is amended by adding Section 901.8, *Permits*, to read as follows:

901.8 Permits. Permits for fire protection systems shall be required as set forth in the *International Fire Code*, as amended.

Section [F]903.1, *General*, is amended by adding Section ~~[F]~~903.1.2, *Safety Factor*, to read as follows:

~~[F]~~ 903.1.2 Safety factor. Automatic sprinkler systems shall be designed with a minimum safety factor of 5 PSI or 10% of required pressure (whichever is greater) taken at the source for the hydraulically most demanding design area.

Section [F] 903.2, *Where required*, is amended to read as follows with the *Exception* remaining as written:

[F] 903.2. Where required. Approved automatic sprinkler systems in new buildings and structures shall be provided in the locations described in Sections 903.2.1 through 903.2.12. Where existing open buildings and structures are modified such that they are no longer open on at least three sides and open a minimum of 50% of the perimeter of the area covered, fire sprinklers systems shall be installed for these change in occupancies in accordance with the applicable requirements in this section. In order to be considered "open" for the purpose of this requirement, an open side shall be at least 50% open with the open area uniformly distributed to prevent the accumulation of smoke and toxic gases.

Section [F] 903.2.1, *Group A*, is amended ~~by adding the following exception to the end of the text~~ to read as follows:

~~[F]~~ 903.2.1 Group A. An automatic sprinkler system shall be provided throughout buildings and portions thereof used as Group A occupancies as provided in this section. For Group A-1, A-2, A-3 and A-4 occupancies, the automatic sprinkler system shall be provided throughout the story where the fire area containing the Group A-1, A-2, A-3 or A-4 occupancy is located, and throughout all stories from the Group A occupancy to, and including, the levels of exit discharge serving the Group A occupancy. For Group A-5 occupancies, the automatic sprinkler system shall be provided in the spaces indicated in Section [F] 903.2.1.5.

Exception: A one-story detached open pavilion consisting of only a roof and supporting columns that meets all of the following criteria shall not require fire sprinklers.

1. The detached open pavilion is a Group A2, Group A3 or Group A4 Occupancy.
2. The detached open pavilion shall be less than 12,000 ft² in area.
3. The detached open pavilion shall be separated from adjacent structures by minimum of 30 feet.
4. The detached open pavilion is open on at least three sides and open a minimum of 50% of the perimeter of the area covered. In order to be considered "open" for the purpose of this exception,

an open side shall be at least 50% open with the open area uniformly distributed to prevent the accumulation of smoke and toxic gases.

5. The detached open pavilion shall have a minimum of 300% of the total number of required exits and a minimum of 300% of total exit minimum width or required capacity based upon the occupant load of the pavilion.

Section 903.2.1.3, Group A-3, is amended by adding the following item to the list of conditions:

[F] 903.2.1.3 Group A-3. An automatic sprinkler system shall be provided throughout stories containing Group A-3 occupancies and throughout all stories from the Group A-3 occupancy to and including the levels of exit discharge serving that occupancy where one of the following conditions exists:

1. The fire area exceeds 12,000 square feet (1115 m²).
2. The fire area has an occupant load of 300 or more.
3. The fire area is located on a floor other than a level of exit discharge serving such occupancies.
4. Any Group A-3 occupancy that serves alcohol shall comply with the fire sprinkler requirements for Group A-2 occupancies in Section 903.2.1.2.

Section [F] 903.2.6, Group I, is hereby amended by amending exception 2 as follows:

[F] 903.2.6 Group I. An Automatic sprinkler system shall be provided throughout buildings with a Group I fire area.

Exceptions:

1. An automatic sprinkler system installed in accordance with Section 903.3.1.2 shall be permitted in Group I-1, Condition 1 facilities.
2. An automatic sprinkler system is not required where Group I-4 child day care facilities are at the level of exit discharge and where every room where care is provided has not fewer than one exterior exit door.
3. In buildings where Group 1-4 day care is provided on levels other than the level of exit discharge, an automatic sprinkler system in accordance with Section 903.3.1.1 shall be installed on the entire floor where care is provided, all floors between the level of care and the level of exit discharge, and all floors below the level of exit discharge other than areas classified as an open parking garage.

Section [F] 903.2.8, Group R, is amended by adding the following exception:

[F] 903.2.8 Group R. An automatic sprinkler system installed in accordance with Section 903.3 shall be provided throughout all buildings with a Group R fire area.

Exception: Foster care family homes as defined in Section 10-25.

Section [F] 903.2.11.1.1, Opening dimensions and access, is amended by adding the following sentence to the end of that section to read as follows:

[F] 903.2.11.1.1 Opening dimensions and access. Openings shall have a minimum dimension of not less than 30 inches (762 mm). Access to such openings shall be provided for the fire department from the exterior and shall not be obstructed in a manner such that fire fighting or rescue cannot be accomplished from the exterior. Openings shall have a finished sill height which is no more than 44 inches (1117 mm) above the finished floor level of the story which the opening is serving.

Section [F] 903.2, Where required, is amended by adding Section [F] 903.2.13, *Porte-cocheres*, to read as follows:

[F] 903.2.13 Porte-cocheres. All porte-cocheres shall be protected with fire sprinklers.

Exception: Porte-cocheres of non-combustible construction under 1,000 square feet.

Section [F] 903.3.1.1.1, *Exempt locations*, is amended by adding item 7 as follows:

[F] 903.3.1.1.1 Exempt locations. Automatic sprinklers shall not be required in the following rooms or areas where such rooms or areas are protected with an *approved* automatic fire detection system in accordance with Section 907.2 that will respond to visible or invisible particles of combustion. Sprinklers shall not be omitted from any room merely because it is damp, of fire--resistance--rated construction or contains electrical equipment.

7. Equipment storage areas of fire stations where sprinklers are considered undesirable because of the nature of the contents, including firefighting apparatus and specialized equipment, when approved by the fire code official.

Section [F] 903.3.1.2, *NFPA 13R sprinkler systems*, is amended by amending [F] 903.3.1.2.3, *Attics*, and by adding Section [F] 903.3.1.2.4, *Elevator machine room*, to read as follows:

[F] 903.3.1.2.3 Attics. Attic protection shall be provided as follows:

1. Attics that are used or intended for living purposes or storage shall be protected by an *automatic sprinkler system*.
2. Where fuel-fired equipment is installed in an unsprinklered attic, not fewer than one quick-response intermediate temperature sprinkler shall be installed above the equipment.
3. Where located in a building of Type III, Type IV or Type V construction designed in accordance with Section 510.2 or 510.4, attics not required by Item 1 to have sprinklers shall comply with one of the following if the roof assembly is located more than 55 feet (16 764 mm) above the lowest level of required fire department vehicle access needed to meet the provisions in Section 503.:
 - 3.1 Provide *automatic sprinkler system* protection.
 - 3.2 Construct the attic using noncombustible materials.
 - 3.3 Construct the attic using fire-retardant-treated wood complying with Section 2303.2.
 - ~~3.4 Fill the attic with noncombustible insulation.~~

The height of the roof assembly shall be determined by measuring the distance from the lowest required fire vehicle access road surface adjacent to the building to the eave of the highest pitched roof, the intersection of the highest roof to the exterior wall, or the top of the highest parapet, whichever yields the greatest distance. For the purpose of this measurement, required fire vehicle access roads shall include only those roads that are necessary for compliance with Section 503 of the *International Fire Code*.

4. Group R-4, Condition 2 occupancy attics not required by Item 1 to have sprinklers shall comply with one of the following:
 - 4.1 Provide *automatic sprinkler system* protection.
 - 4.2 Provide a heat detection system throughout the attic that is arranged to activate the building fire alarm system.
 - 4.3 Construct the attic using noncombustible materials.
 - 4.4 Construct the attic using fire-retardant-treated wood complying with Section 2303.2.
 - ~~4.5 Fill the attic with noncombustible insulation.~~

[F] 903.3.1.2.4 Elevator machine room. In all R occupancies or occupancies using a 13R system with elevator systems, the elevator machine room shall be sprinklered per NFPA 13.

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SECTION 903, AUTOMATIC SPRINKLER SYSTEMS, is amended by amending [F] 903.4, Sprinkler system supervision and alarms, to add Exception ~~98~~, and adding Section [F] 903.6, Separation from non-sprinklered areas, to read as follows:

[F] 903.4 Sprinkler system supervision and alarms. Valves controlling the water supply for automatic sprinkler systems, pumps, tanks, water levels and temperatures, critical air pressures and water-flow switches on all sprinkler systems shall be electrically supervised by a *listed* fire alarm control unit.

Exceptions:

~~98.~~ Valves located outside buildings or in a vault that are sealed or locked in the open position.

[F] 903.6 Separation from non-sprinklered areas. Unless otherwise exempted by this code or the ~~2018~~~~2021~~ International Fire Code (IFC) or required to be of a higher fire resistive construction by this code or the IFC, a minimum one hour fire barrier constructed in accordance with Chapter 7 shall be between sprinklered and non-sprinklered areas within a building.

Section [F] 904.2.2, Commercial hood and duct systems, is amended by adding Section [F] 904.2.2.1, Permit required, as follows:

[F] 904.2.2.1 Permit required. Prior to installation, a licensed contractor shall obtain a permit for automatic fixed pipe extinguishing system from the Fire Marshal's office. At the time a permit request is made, a diagram detailing exactly what will be installed at the "permit site" shall be submitted for Fire Department review and files. The diagram shall include:

1. Approximate length of pipe and elbows
2. Distance of nozzles from grill area
3. Exact size, type and number of nozzles
4. Number and location of fusible links
5. Size of cooking surface area, hood, and vent area
6. Location of manual pull
7. Location of automatic gas or electric shut-off, electric shut-off is to be a total shut-off
8. The location of the automatic extinguishing system in the room and distance of exits must be shown

The installation is not complete until all automatic electric or gas shut-offs are installed. Permittee is responsible for the total installation. Permittee shall call Fire Prevention for a final inspection after the system is completed. The fire inspector shall require an operations test of the system be performed on the final inspection. Agent discharge shall not be required if: (a) Installer certifies in writing that system has been designed and installed in accordance with manufacturers specifications, and (b) an air discharge test is performed.

Section [F] 905.1, General, is amended by adding Section [F] 905.1.1, Safety factor, as follows:

[F] 905.1.1 Safety factor. All standpipe systems with the exception of manual standpipes shall be designed with a minimum safety factor of 5 PSI or 10% of required pressure (whichever is greater) taken at the source for the hydraulically most demanding system and/or outlet.

Section [F] 905.2, *Installation standard*, is amended by adding Section [F] 905.2.1, *Class-I reducers*, as follows:

[F] 905.2.1 Class-I reducers. A 2.5 inch by 1.5 inch reducer shall be provided on Class-I standpipe connections with caps and chains.

Section [F] 905.4, *Location of Class I standpipe hose connections*, is amended as follows with all other code text to remain as written:

[F]905.4 Location of Class I standpipe hose connections. Class I standpipe hose connections shall be provided in all of the following locations:

1. In every required *interior exit stairway*, a hose connection shall be provided for each story above and below grade plane. Hose connections shall be located at ~~[the main]~~ an intermediate [floor] landing between stories unless otherwise *approved* by the fire code official.

~~[Exception: A single hose connection shall be permitted to be installed in the open corridor or open breezeway between open stairs that are not greater than 75 feet (22 860 mm) apart.]~~

SECTION [F] 906.2, *General requirements*, is amended by adding Section [F] 906.2.1, *Travel distance*, as follows:

[F] 906.2.1 Travel distance. Travel distance is calculated from a point in the occupancy to the location of fire extinguisher located on the same floor level in accordance with the maximum distances listed in [F] Table 906.3(1) or [F] Table 906.3(2). Travel distance is calculated per floor when determining travel distance to a fire extinguisher in multi-story buildings.

Section [F] 906, *PORTABLE FIRE EXTINGUISHERS*, is amended by adding Section [F]906.5.1, *Conspicuous locations in Group R occupancies*, and Section [F] 906.11, *Inspections of non-rechargeable fire extinguishers in R occupancies* as follows:

[F] 906.5.1 Conspicuous locations in Group R occupancies. In addition to other areas listed herein or in NFPA10, fire extinguishers in R occupancies may also be placed in any of the following location to satisfy the requirements:

1. On a wall in the unit;
2. Inside a closet, cabinet or pantry as long as the door has a label indicating that there is a fire extinguisher inside;
3. Inside a mechanical closet as long as the door has a label indicating that there is a fire extinguisher insider; or
4. Inside storage closets as long as the door has a label indicating that there is a fire extinguisher insider and there is no locking device on the door that requires a key or combination to open it.

If methods 2, 3, or 4 are utilized, the following must be done at the time of each new move-in: (i) A label or notice indicating that there is a fire extinguisher inside the area must be placed on the door; or (ii) a notice of the location of the fire extinguisher must be given to the resident.

[F] 906.11 Inspections of non-rechargeable fire extinguishers in R occupancies. As an alternative to required fire extinguisher annual inspections conducted by licensed and certified personnel, the owner or management company, their employees or agents are authorized to inspect non-rechargeable fire extinguishers located in R occupancies on an annual basis to ensure that:

1. The extinguisher's service life is not beyond the manufacturer's recommended warranty date;
2. Pin has not been removed;
3. The indicator gauge is in the green or good position;
4. Installed in the proper location per section 906.5;
5. No obvious physical damage, corrosion, or nozzle blockage is present; and
6. The operating instructions are present, ~~and~~ legible, ~~and facing forward.~~

The owner or owner's agent shall repair or replace a fire extinguisher if any of the deficiencies noted in items 1-6 above are discovered on inspection.

While inspecting the non-rechargeable fire extinguishers, the inspection personnel shall cause the contents of the non-rechargeable fire extinguishers to be stirred by turning the fire extinguishers upside down at least two times.

In lieu of placing tags or labels on non-rechargeable fire extinguishers to verify inspection, a log or inspection sheet may be maintained indicating compliance with all the requirements above.

SECTION 907, FIRE ALARM AND DETECTION SYSTEMS, is amended by repealing Section [F] 907.1.2, Fire alarm shop drawings, and replacing with [F] 907.1.2, Fire alarm shop drawings, and adding Section [F] 907.1.4, Testing of Fire Alarm Systems, as follows:

[F] 907.1.2 Fire alarm shop drawings. Shop drawings for fire alarm systems shall be submitted for review and approval prior to system installation, and shall include, but not be limited to, all of the following where applicable to the system being installed:

1. A floor plan that indicates the use of all rooms.
2. Locations of alarm-initiating devices.
3. Locations of alarm notification appliances, including candela ratings for visible alarm notification appliances.
4. Design minimum audibility level for occupant notification
5. Location of fire alarm control unit, transponders and notification power supplies.
6. Annunciators.
7. Power connection.
8. Battery calculations. Calculations are to be completed using a battery derating factor of 20% minimum.
9. Conductor type and sizes.
10. Voltage drop calculations. Calculations shall be completed using a maximum starting voltage of 20.4 volts for 24-volt systems and 10.2 volts for 12-volt systems.
11. Manufacturers' data sheets indicating model numbers and listing information for equipment, devices and materials.
12. Details of ceiling height and construction.
13. The interface of fire safety control functions.
14. Classification of the supervising station.
15. For in-building emergency voice alarm communication systems and mass notification systems, speaker circuit load calculations providing a total dB loss at the end of each speaker circuit.

16. Acoustically distinguishable space classifications and designations in accordance with NFPA 72, 2013 Edition Chapter 8, indicated on the floor plans in each applicable area with a designation and classification legend provided in tabular form.
17. When utilizing acoustic modeling software to determine acoustically distinguishable spaces, include reports from the modeling software with the submittal package.
18. For aspirating smoke detection systems, full transport time calculations shall be provided with the submittal package.
19. For aspirating smoke detection systems, a dimensioned plan view and dimensioned isometric view of the protected area shall be provided with the submittal package.
20. For fire alarm control unit replacement projects, to include those with minor modifications to the existing system, that do not include the addition of initiating or signaling devices, with the exception of off premise communicators, a detailed fire alarm riser diagram that provides circuits and specific locations of all control equipment, annunciation equipment, power supplies, initiating and signaling devices shall be provided in the submittal package. Additionally, standby battery calculations for the new fire alarm control unit only, a scope of work narrative signed by the registered design professional

[F] 907.1.4 Testing of fire alarm systems. The following are required at the time of fire alarm acceptance testing unless approved by the Fire Marshal or his/her designee:

1. The written statement required by NFPA 72, section 4.5.1.2
2. A copy of the Record of Completion as required by NFPA 72, section 4.5.2.1
3. A copy of the Texas Department of Insurance Fire Alarm Installation Certificate
4. Approved plans bearing the original stamp and signature of the fire alarm plan reviewer
5. Original permit is on site.
6. Fire Review Activity form (plan review comments) if provided.
7. Proof of current licensing of the technician performing the tests.
8. Written approvals from the AHJ if partial installation inspections are requested by the contractor or technician.
9. Site specific software for software based systems.
10. Written sequence of operation.
11. All testing equipment necessary to conduct the test (i.e. decibel meter, flashlight, intelligibility meter, etc)

Section [F] 907.2.1.2, Emergency voice/alarm communication captions, is repealed in its entirety.

Section [F] 907.2.3, Group E, is amended to read as follows with remaining text to remain as written:

[F] 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 all newly constructed Group E [~~occupancies~~] occupancy campus complexes. Where automatic sprinkler systems or smoke detectors are installed, such systems or detectors shall be connected to the building fire alarm system.

Section [F] 907.2.7.1, Occupant notification, is repealed in its entirety.

Section [F] 907.2.8.2, Automatic smoke detection system, is hereby amended to read as follows:

[F] 907.2.8.2 Automatic smoke detection system. An automatic smoke detection system that activates the occupant notification system in accordance with Section 907.5 shall be installed

throughout all interior corridors serving sleeping units. The automatic smoke detection system requirement is met only by the installation of smoke or beam detectors whenever possible. If environmental conditions do not allow the installation of smoke detectors, fire alarm heat detectors may be used on a limited basis when approved by the fire code official.

Exception: An automatic smoke detection system is not required in buildings that do not have interior corridors serving sleeping units and where each sleeping unit has a means of egress door opening directly to an exit or to an exterior exit access that leads directly to an exit.

SECTION 907.2.12.2, Fire department communication system, is hereby deleted in its entirety.

Section ~~[FM]~~ 907.2.1~~32~~.1.2, Duct smoke detection, is amended to read as follows:

[FM] 907.2.1~~32~~.1.2 Duct smoke detection. Duct smoke detectors complying with Section 907.3.1 shall be located in accordance with the NFPA 90A: Standard for the Installation of Air-Conditioning and Ventilating Systems or as follows:

1. In the main return air and exhaust air plenum of each air-conditioning system having a capacity greater than 2,000 cubic feet per minute (cfm) (0.94 m³/s). Such detectors shall be located in a serviceable area downstream of the last duct inlet.
2. At each connection to a vertical duct or riser serving two or more stories from a return air duct or plenum of an air-conditioning system. In Group R-1 and R-2 occupancies, a smoke detector is allowed to be used in each return air riser carrying not more than 5,000 cfm (2.4 m³/s) and serving not more than 10 air-inlet openings.

Section [F] 907.2.13.2, Fire department communication system, is hereby deleted in its entirety.

Section ~~–~~[F] 907.2, Where required - new buildings and structures, is amended by adding Section [F] 907.2.24, Fire alarm systems for property protection, to read as follows:

[F] 907.2.24 Fire alarm systems for property protection. Fire alarm systems dedicated solely to the protection of property are permitted to be installed in facilities where a fire alarm system is not required by other sections of this code or the International Building Code provided the following conditions are met:

1. Any and all automatic detection is installed, located and maintained in accordance with the requirements of NFPA 72 and a documentation cabinet as required by NFPA 72 is provided and installed.
2. The installed system is monitored by a supervising station which provides remote, proprietary or central station service.
3. One manual means of activation is installed in an *approved* location
4. Where the fire alarm system control unit is located in an area that is not readily accessible to response personnel, a remote fire alarm system annunciator panel is installed.

Section [F] 907.3.1, Duct smoke detectors, is amended to read as follows:

[F] 907.3.1 Duct smoke detectors. Smoke detectors installed in ducts shall be *listed* for the air velocity, temperature and humidity present in the duct. Duct smoke detectors shall be connected to the building's fire alarm control unit where a fire alarm system is required by Section 907.2. Activation of a duct smoke detector shall initiate a visible and audible supervisory signal at a *constantly attended location* and shall perform the intended fire safety function in accordance with this code, NFPA 90A: Standard for the Installation of Air-Conditioning and Ventilating Systems and the *International Mechanical Code*. In facilities that are required to be monitored by a supervising station, duct smoke detectors shall report only as a supervisory signal and not as a fire alarm. They shall not be used as a substitute for required open area detection.

Exceptions:

- ~~[1. The supervisory signal at a constantly attended location is not required where duct smoke detectors activate the building's alarm notification appliances.]~~
1. ~~[2.]~~ In occupancies not required to be equipped with a fire alarm system, actuation of a smoke detector shall activate a visible and an audible signal in an *approved* location. Smoke detector trouble conditions shall activate a visible or audible signal in an *approved* location and shall be identified as air duct detector trouble.
 2. For fire alarm systems which cannot be programmed for supervisory signals, duct detectors shall be allowed to activate the alarm signal.

Section [F] 907.3., *Fire safety functions*, is amended by adding Section [F] 907.3.5, *Fire alarm systems - emergency control*, as follows:

[F] 907.3.5 Fire alarm systems - emergency control. At a minimum, the following functions, where provided, shall be activated by the fire alarm system:

1. Elevator capture and control in accordance with ASME/ANSI A17.1b, *Safety Code for Elevators and Escalators*.
2. Release of automatic door closures and hold open devices.
3. Stairwell and/or elevator shaft pressurization.
4. Smoke management and/or smoke control systems.
5. Initiation of automatic fire extinguishing equipment.
6. Emergency lighting control.
7. Unlocking of doors.
8. Emergency shutoff of gas and fuel supplies that may be hazardous provided the continuation of service is not essential to the preservation of life.
9. Emergency shutoff of audio systems for sound reinforcement or entertainment (i.e. music systems, systems for announcement and broadcast which are separate from public address systems) provided that such systems are not used to issue emergency instructions.
10. Emergency shutoff of systems used for the creation of displays or special effects (i.e. lighting effects, laser light shows, projection equipment).

Section [F] 907.4.2.1, *Location*, is amended to add the Exception to read as follows:

[F] 907.4.2.1 Location. Manual fire alarm boxes shall be located not more than 5 feet (1524 mm) from the entrance to each *exit*. In buildings not protected by an *automatic sprinkler system* in accordance with Section 903.3.1.1 or 903.3.1.2, additional manual fire alarm boxes shall be located so that the distance of travel to the nearest box does not exceed 200 feet (60 960 mm).

Exception: Where construction of the building prohibits the proper installation of a pull station (e.g. glass walls, interior brick or rock walls), a pull station shall be allowed to be located in the normal path of egress, where approved by the Fire Marshal or his/her designee.

Section [F] 907.5.1, *Presignal feature*, is amended to read as follows:

[F] 907.5.1 Presignal feature and positive alarm sequences. A presignal feature or Positive Alarm Sequence as defined in NFPA 72 shall ~~not be installed unless approved by the fire code official~~ be provided only where approved and the fire department. Request to use a presignal feature or a Positive Alarm Sequence must be submitted in writing to the Fire Marshal and approval granted before installation. ~~Where a The -presignal feature- or Positive Alarm Sequence is provided, a signal shall be~~ annunciated at an approved, constantly attended location, -approved by the fire code official, so

~~that~~having the capability to activate the occupant notification ~~can be activated~~system in the event of fire or other emergency. When approved by the fire code official, the presignal feature or Positive Alarm Sequence shall be implemented in accordance with the requirements of NFPA 72.

Section [F] 907.5.2.1, Audible alarms, is amended by adding Section [F] 907.5.2.1.~~34~~, Testing of audible alarms in occupancies other than Group R, and Section [F] 907.5.2.1.~~45~~, Testing of audible alarms in Group R occupancies, as follows:

[F] 907.5.2.1.~~3~~4 Testing of audible alarms in occupancies other than Group R. Audibility levels for all occupancies other than Group R shall be in accordance with the public mode requirements of NFPA 72, and shall be tested utilizing the following criteria:

1. A UL listed sound pressure level meter, which has been calibrated within the last calendar year, and supplied by the fire alarm system installing contractor, shall be utilized to obtain readings. The sound pressure level meter will be held five feet above floor, pointed in the direction of the audible device.
2. All doors within the occupancy, including the bathroom and balcony doors shall be in the closed position.
3. Measurements shall be taken in the most remote areas of the occupancy first, including bathrooms and balconies.
4. Initial measurements to confirm the average ambient sound level in each area shall be taken.
5. The fire alarm system shall be activated and measurements in the tested areas shall be retaken and compared with the requirements.

[F] 907.5.2.1.~~4~~5 Testing of audible alarms in Group R occupancies. Audibility levels for all Group R occupancies shall be in accordance with the requirements of Section [F] 907.5.2.1.1, and shall be tested utilizing the following criteria:

1. A UL listed sound pressure level meter, which has been calibrated within the last calendar year, and supplied by the fire alarm system installing contractor, shall be utilized to obtain readings. The sound pressure level meter will be held five feet above floor, pointed in the direction of the audible device.
2. All doors within the occupancy, including the bathroom and balcony doors shall be in the closed position.
3. Ambient sound level shall be established with the television set at 50% of maximum volume, showers running, bathroom exhaust systems running, and air conditioning units running.
4. Measurements shall be taken in the most remote area of the dwelling or sleeping unit first, including bathrooms and balconies.
5. Initial measurements to confirm the ambient sound level in each area shall be taken.
6. The fire alarm system shall be activated and measurements in the tested areas shall be retaken and compared with the requirements.

Section [F] 907.5.2.2, Emergency voice/alarm communication systems, is amended to read as follows:

[F] 907.5.2.2 Emergency voice/alarm communication systems. Emergency voice/alarm communication systems required by this code shall be designed and installed in accordance with NFPA 72. The operation of any automatic fire detector, sprinkler waterflow device or manual fire alarm box shall automatically sound an alert tone followed by voice instructions giving *approved* information and directions for a general or staged evacuation in accordance with the building's fire safety and evacuation plans required by Section 404 of the *International Fire Code*. In high-rise buildings, the system shall operate on at least the alarming floor, the floor above and the floor below. If the system

is not reset after five minutes, the building shall sound the general evacuation signal and message in all zones unless an alternative Positive Alarm Sequence has been approved by the Fire Marshal. Speakers shall be provided throughout the building by paging zones. At a minimum, paging zones shall be provided as follows:

1. Elevator groups.
2. *Interior exit stairways.*
3. Each floor.
4. *Areas of refuge* as defined in Chapter 2.

Exception: In Group I-1 and I-2 occupancies, the alarm shall sound in a constantly attended area and a general occupant notification shall be broadcast over the overhead page.

Section [F] 907.5.2.2.4, Emergency voice/alarm communication captions, is repealed in its entirety.

Section [F] 907.5.5.2.3.1, Public use areas and common use areas, is amended to read as follows:

[F] 907.5.2.3.1. Public use areas and common use areas. Visible alarm notification appliances shall be provided in public use areas and common use areas as defined in Chapter 2.

Exceptions:

1. Where employee work areas have audible alarm coverage, the notification appliance circuits serving the employee work areas shall be initially designed with not less than 20-percent spare capacity to account for the potential of adding visible notification appliances in the future to accommodate hearing-impaired employee(s). For the purpose of this code, cold storage areas (e.g. walk-in coolers and freezers), mechanical and/or electrical rooms, main distribution and intermediate distribution frame (MDF/IDF) rooms are considered employee work areas.
2. Visible notification appliances are not required in storage rooms or closets with an area of less than one-hundred (100) square feet (9.29 square meters), except for clean or soiled utility and clean or soiled linen rooms in Institutional Group I occupancies. NOTE: this exception does not apply to requirements set forth by entities other than the City of San Antonio (e.g. Texas Department of Licensing and Regulation enforcing the requirements of the Texas Accessibility Standards, Texas Department of State Health Services enforcing licensing of health care facilities in the State of Texas, or the Joint Commission, formerly the Joint Commission on Accreditation of Healthcare Organizations).

Section [F] 907.5.2.3.3.1, Wired equipment, is amended by adding items 4 and 5 and all other text to remain as written:

[F] 907.5.2.3.3.1 Wired equipment. Where wired equipment is used to comply with the future capability required by Section 907.5.2.3.3, the system shall include one of the following capabilities:

4. Extension of the fire alarm wiring to all living areas, restrooms, and sleeping areas of all dwelling units. The wiring must terminate in an electrical box suitable for securely mounting an audible/visible appliance. The fire alarm system shop drawings required by Section 907.1.2 shall include the power supply and circuit documentation to accommodate the extension of the wiring.
5. Where 200 percent of the visual alarms required in Table 907.5.2.3.2 for Groups I-1 and R-1 occupancies are provided in selected dwelling units, the selection of the dwelling units to be so equipped shall be at the discretion of the facility owner. Any dwelling units required to be equipped with audible/visual appliances to provide accessibility in accordance with Department

of Housing and Urban Development rules, Americans with Disabilities Act Accessibility Guidelines or Texas Accessibility Standards are permitted to be included in the 200 percent total. The use of this exception requires the facility owner to sign and return the notarized SAFD Form 6007 (Letter of Understanding), which may be obtained from the San Antonio Fire Department Fire Prevention Division or the Development Services Department.

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Section [F] 907.5.2.3, *Visible alarms*, is amended by adding a subsection [F] 907.5.2.3.4, *Group R-2 sleeping areas*, and Section [F] 907.5.2.3.5, *Combination devices*, to read as follows:

[F] 907.5.2.3.4 Group R-2 sleeping areas. Living rooms in Group R-2 occupancies shall have audible notification appliances that meet the sleeping area audible requirements of NFPA 72, Chapter 18, Section 18.4.5, Subsection 18.4.5.1. When such units are required to be equipped with visible notification for the hearing impaired or when such units are designated as accessible in accordance with ICC/ANSI A117.1, combination audible and visible notification appliances that meet both the sleeping area audible requirements of NFPA 72, Chapter 18, Section 18.4.5, Subsection 18.4.5.1 and the effective intensity settings of NFPA 72, Chapter 18.5.5.7.2 shall be installed.

-[F] 907.5.2.3.5 Combination devices. Combination 120 VAC single or multiple-station smoke detectors with an onboard visible notification appliance if utilized to meet the requirements of Section 907.2.11, will not be given credit for meeting the visible alarm notification requirements of Section 907.5.2.3.3 if these devices do not have the capability of supplying backup power for the visible notification appliance portion of the device. Should such devices be utilized to comply with Section 907.2.11, the visible appliance side of the device shall flash in synchronization with the notification appliances required in the unit.

Section [F] 907.6.3, *Initiating device identification*, is amended to read as follows with exceptions to remain as written:

[F] 907.6.3 Initiating device identification. The fire alarm system shall identify the specific initiating device address, location, device type, floor level where applicable and status including indication of normal, alarm, trouble and supervisory status, to the fire alarm panel, annunciator panel and to the supervising station as appropriate.

SECTION 907, *FIRE ALARM AND DETECTION SYSTEMS*, is amended by adding Section [F] 907.9, *Alarm signal silencing switch*, to read as follows:

[F] 907.9 Alarm signal silencing switch. A switch for silencing the alarm signal sounding appliances shall be permitted only if it is key operated, located within a locked cabinet or requires special knowledge. Such a switch shall be permitted only if visible zone alarm indication or equivalent has been provided by approved annunciation, printout, or other approved means, and subsequent alarms on other initiating devices circuits will cause the audible alarm signaling appliances to resound. A switch that is left in the "silence" position when there is no alarm shall operate trouble signals until the switch is restored to normal.

Section [F] 908.3, Fire alarm system interface, is hereby amended to read as follows:

[F] 908.3 Fire alarm system interface. Where an emergency alarm system is ~~[interfaced]~~ provided, it shall be interfaced with the ~~[a]~~ building's fire alarm system, and the signal produced at the fire alarm control unit shall be a supervisory signal.

Section [F] 912.2.1, *Visible location*, is amended by adding the following sentence to the end of that section to read as follows:

[F] 912.2.1 Visible location. Fire department connections shall be located on the street side of buildings or facing approved fire apparatus access roads, fully visible and recognizable from the street, fire apparatus access road or nearest point of fire department vehicle access or as otherwise *approved* by the *fire code official*. The fire department connection shall be identified by a sign installed above the connection with the letters "FDC" not less than 6 inches high and mounted no lower than 7 feet from grade to the bottom edge of the sign unless approved by the fire code official.

Section [F] 912.2.2, *Existing buildings*, is amended to read as follows:

[F] 912.2.2 Existing buildings. On existing buildings, wherever the fire department connection is not visible to approaching fire apparatus, the fire department connection shall be indicated by an *approved* sign mounted on the street front or on the side of the building. Such sign shall have the letters "FDC" not less than 6 inches (152 mm) high and words in letters not less than 2 inches (51 mm) high or an arrow to indicate the location. ~~[Such]~~ Signs shall be mounted no lower than 7 feet from grade to the bottom edge of the sign and are subject to the approval of the *fire code official*.

Section [F] 912.4.1, *Locking fire department connection caps*, is amended to read as follows:

[F] 912.4.1 Locking fire department connection caps. Fire department connection(s) shall have locking caps in the following areas/occupancies: the area described in Section 11-37 of the city's fire code; Group A, E, I occupancies; high-rise buildings; any other location that the fire code official determines that a locking cap would be necessary and/or beneficial for firefighting needs. ~~[The fire code official is authorized to require locking caps on fire department connections for water-based fire protection systems where the responding fire department carries appropriate key wrenches for removal.]~~

SECTION [F] 912, *FIRE DEPARTMENT CONNECTIONS*, is amended by adding Section [F] 912.7, *Location and type*, as follows:

[F] 912.7 Location and type. Sprinkler system and standpipe fire department hose connections shall be as follows:

1. Within 40 feet of a public street, approved fire lane, or access roadway.
2. Within 250 feet of an approved fire hydrant measured per hose lay criteria in Section 507.5.1.2, except for R-2 apartments in which the fire department connection shall be within 500 feet of an approved fire hydrant measured per hose lay criteria in Section 507.5.1.2.
3. Minimum of two feet above finished grade and a maximum of four feet above finished grade for standard inlets and minimum of 30 inches at lowest point above finished grade and maximum of four feet above finished grade for the five inch "Storz" inlet.
4. Freestanding FDCs shall be installed a minimum of one foot and a maximum of seven feet from the gutter face of the curb.
5. The Fire Code Official shall approve the location of freestanding fire department connections. Freestanding FDCs must be physically protected against impact per the requirements of Section 312 or other approved means.
6. Where provided, the five inch "Storz" inlet shall be installed at a 30 degree angle pointing down.
7. Fire department connections for H occupancies shall be freestanding, remote and located as determined by the fire code official.
8. Fire department connections for systems protecting fuel storage tanks shall be freestanding, remote and located as determined by the fire code official.
9. See Table 912.7

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Table 912.7**FDC Connections required by System Type**

<u>Sprinkler Systems: Wet Dry</u>	<u>Either a 5 Inch Storz inlet or (2) 2 ½ Inch inlets</u>		
<u>Standpipes: Automatic Wet Automatic Dry Semiautomatic Dry</u>		<u>Either a 5 Inch Storz inlet or (2) 2 ½ Inch inlets</u>	
<u>Standpipes: Manual Wet Manual Dry</u>			<u>A 5 Inch Storz inlet for the first 1000 gallons system demand and an additional 2 ½ inlet for each additional 250 gallon demand or portion thereof</u>

<u>Sprinkler Systems Wet Dry</u>	<u>Either a 5 Inch Storz inlet or (2) 2 ½ Inch inlets</u>		
<u>Standpipes: Automatic Wet Automatic Dry Semiautomatic Dry</u>		<u>Either a 5 Inch Storz inlet or (2) 2 ½ Inch inlets</u>	
<u>Standpipes: Manual Wet Manual Dry</u>			<u>A 5 Inch Storz inlet for the first 1000 gallons system demand and an additional 2 ½ inlet for every 250 gallon demand or portion thereof</u>
<u>Standpipes: All Highrise</u>			<u>Two fire department connections shall be provided for each zone, located either on opposite corners of the building where fire department apparatus access is provided or, where not possible, physically separated to the greatest extent possible for the following:</u> <u>1. High-rise buildings</u>

			<p><u>2. Buildings or multiple attached buildings exceeding 900 ft (274.3 m) perimeter distance</u></p> <p><u>Per 2019 NFPA 14 7.12.2.2</u></p>
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There shall be no more than one Storz connection in any configuration.

*One (1) 2.5 inch inlet is required for all systems designed per NFPA 13R. If the system demand is greater than 250 GPM, two (2) 2.5 inch inlets are required to be installed. No FDC is required for projects designed per NFPA 13D.

Section ~~[F]~~ 1003, *GENERAL MEANS OF EGRESS*, is amended by adding the Section ~~[F]~~ [F] 1003.8, *Special provisions*, as follows:

[F] ~~[F]~~ 1003.8 Special provisions. Rooms in E occupancies used for kindergarten or daycare classified as an E occupancy shall not be located above or below the first story.

Exceptions:

1. Basements or stories having floor levels located within four feet, measured vertically, from adjacent ground level at the level of exit discharge, provided the basement or story has exterior exit doors at that level.
2. In buildings equipped with an automatic sprinkler system throughout, rooms used for kindergarten or for daycare purposes may be located on the second story, provided there are at least two exterior exit doors for the exclusive use of such occupancies.

Section 1004.5, *Areas without fixed seating*, is amended by adding a sentence to the end of the main body of the section to read as follows:

1004.5 Areas without fixed seating. The number of occupants shall be computed at the rate of one occupant per unit of area as prescribed in Table 1004.5. For areas without *fixed seating*, the occupant load shall not be less than that number determined by dividing the floor area under consideration by the *occupant load* factor assigned to the function of the space as set forth in Table 1004.5. Where an intended function is not listed in Table 1004.5, the Building Official ~~[building official]~~ shall establish a function based on a listed function that most nearly resembles the intended function. When the calculated number is not a whole number, it is required to round up to the next whole number for determination of the occupant load of a space.

Exception: Where approved by the Building Official, ~~[building official]~~ the actual number of occupants for whom each occupied space, floor or building is designed, although less than those determined by calculation, shall be permitted to be used in the determination of the design *occupant load*.

Section 1008.3, *Emergency power for illumination*, is amended by adding Section 1008.3.6, *Illumination in Group E occupancies*, to read as follows:

1008.3.6 Illumination in Group E occupancies. Group E occupancies shall have emergency lighting in interior stairs, corridors, windowless areas with student occupancy, shops, and laboratories.

SECTION 1009, *ACCESSIBLE MEANS OF EGRESS*, is repealed and replaced with a new SECTION 1009 to read as follows:

SECTION 1009
ACCESSIBLE MEANS OF EGRESS

All buildings or portions of buildings must comply with the accessibility standards adopted by the State. Projects shall be submitted to the Texas Department of Licensing and Regulation for review, inspection and approval in accordance with state law.

SECTION 1025.1, LUMINOUS EGRESS PATH MARKINGS, is amended by adding Exception #2, to read as follows:

Exception 2. Luminous egress path markings shall not be required where integral battery backup lighting is installed within an interior exit stairway and is capable of indicating a failure and relaying that notification to a supervised system.

SECTION 1027, EXTERIOR EXIT STAIRWAYS AND RAMPS, is amended by adding Section 1027.7, Exterior fire escape, to read as follows:

1027.7 Exterior fire escape. Any existing fire escape which is deemed to be an adequate fire escape under the laws of the state or under the provisions of the city fire prevention regulations shall be deemed an adequate means of egress for emergency use, as required by this chapter, and the number of existing exterior fire escapes shall be provided to comply with the fire escape law of the state and the city fire prevention regulations.

CHAPTER 11, ACCESSIBILITY, is repealed and replaced with a new CHAPTER 11 to read as follows:

CHAPTER 11
ACCESSIBILITY

All buildings or portions of buildings must comply with the accessibility standards adopted by the state. Projects shall be submitted to the Texas Department of Licensing and Regulation for review, inspection and approval in accordance with state law.

Section 1502.4, Gutters, is amended by adding Section 1502.4.1, Zero lot line development, and Section 1502.4.2, Projections, to read as follows:

1502.4.1 Zero lot line development. On zero lot line development where roof projections are allowed by deed covenant or ingress/egress easements and the roof slopes towards the adjoining property, adequate gutters and downspouts shall be provided to direct roof water away from adjacent property. Roof projections shall not extend beyond a point one third the width of the easement or a maximum of 24 inches (610 mm). If there is no slope towards zero lot line, gutters are not necessary.

1502.4.2 Projections. Any Group R or Group U occupancy with roof edges less than three feet (914 mm) to any property line shall be provided with gutters and downspouts to direct roof water away from adjacent property.

Section 1704.2, *Special inspections and tests*, is amended to read as follows:

1704.2 Special inspections and tests. Where application is made to the Building Official ~~{building official}~~ for construction as specified in Section 10-6 ~~{Section 105}~~, the owner or the registered design professional in responsible charge acting as the owner's authorized agent ~~{, other than the contractor, }~~ shall employ one or more *approved agencies* to provide *special inspections* and tests during construction on the types of work specified in Section 1705 and identify the *approved agencies* to the Building Official ~~. {building official.}~~ The special inspector shall not be employed by the contractor. These *special inspections* and tests are in addition to the inspections by the Building Official ~~{building official}~~ that are identified in Section 10-11 of this chapter. ~~{140.}~~

Exceptions:

1. *Special inspections* and tests are not required for construction of a minor nature or as warranted by conditions in the jurisdiction as *approved* by the Building Official ~~{building official}~~.
2. Unless otherwise required by the Building Official ~~{building official}~~, *special inspections* and tests are not required for Group U occupancies that are accessory to a residential occupancy including, but not limited to, those listed in Section 312.1.
3. *Special inspections* and tests are not required for portions of structures designed and constructed in accordance with the cold-formed steel light-frame construction provisions of Section 2211.1.2 or the conventional light-frame construction provisions of Section 2308.
4. The contractor is permitted to employ the *approved agencies* where the contractor is also the owner.

Section 1704.2.1, *Special inspector qualifications*, is amended to read as follows:

1704.2.1 Special inspector qualifications. Prior to the start of the construction and upon request, the *approved agencies* shall provide written documentation to the Building Official ~~{building official}~~ demonstrating the competence and relevant experience or training of the special inspectors who will perform the *special inspections* and tests during construction. Experience or training shall be considered relevant where the documented experience or training is related in complexity to the same type of *special inspection* or testing activities for projects of similar complexity and material qualities. These qualifications are in addition to qualifications specified in other section of this code.

The *registered design professional in responsible charge* and engineers of record involved in the design of the project are permitted to act as the *approved agency* and their personnel are permitted to act as the special inspectors for the work designed by them, provided they qualify as special inspectors.

Section 1704.2.4, *Report requirement*, is amended to read as follows:

1704.2.4 Report requirement. *Approved agencies* shall keep records of special inspections and tests. The *approved agency* shall submit reports of *special inspections* and tests to the Building Official ~~upon request, {building official}~~ and to the *registered design professional in responsible charge*. Individual inspection reports ~~{Reports}~~ shall indicate that work inspected or tested was or was not completed in conformance to *approved construction documents*. Discrepancies shall be brought to the immediate attention of the contractor for correction. If they are not corrected, the discrepancies shall be brought to the attention of the Building Official ~~{building official}~~ and to the *registered design professional in responsible charge* prior to completion of that phase of the work. A final report written by the *registered design professional in responsible charge* documenting all of the required *special inspections* and tests, the special inspectors, and the corrective action taken for ~~{and correction of}~~ any discrepancies noted in the inspections and ~~{or}~~ tests, shall be submitted ~~{at a point in time agreed upon prior to the start of work}~~ by the owner or the owner's authorized agent to ~~{the building official.}~~ the Building Official prior to the Building Official issuing the certificate of occupancy or temporary certificate of occupancy.

Section 1704.2.5.1, *Fabricator approval*, is amended to read as follows:

1704.2.5.1 Fabricator approval. *Special inspections during fabrication required by Section 1704 are not required where the work is done on the premises of a fabricator that is enrolled in a nationally accepted inspections program acceptable to the registered design professional in responsible charge. [approved to perform such work without special inspection. Approval shall be based upon review of the fabricator's written fabrication procedures and quality control manuals that provide a basis for control of materials and workmanship, with periodic auditing of fabrication and quality control practices by an approved agency or the building official.] At completion of fabrication, the acceptable [approved] fabricator shall submit a certificate of compliance to the owner and the registered design professional in responsible charge. [or the owner's authorized agent for submittal to the *Building Official* as specified in Section 1704.5 stating that the work was performed in accordance with the approved construction documents.] The certificate of compliance shall state that the work was performed in accordance with the approved construction documents. The certificate of compliance shall also be made available to the *Building Official* upon request.*

Section 1804.1, Excavation near foundations, is amended to read as follows:

1804.1 Excavation near foundations. *Excavation for any purpose shall not reduce vertical or lateral support for any foundation or adjacent foundation without first underpinning or protecting the foundation against detrimental lateral or vertical movement, or vertical movement, or both, in accordance with Section 1803.5.7. Displacements shall comply with industry standards.*

SECTION 2109, EMPIRICAL DESIGN OF ADOBE MASONRY, is amended to read as follows; All other code text remains as is:

SECTION 2109 EMPIRICAL DESIGN OF ~~[ADOBE MASONRY]~~ EARTHEN WALL SYSTEMS

2109.1 General. Empirically designed ~~[adobe masonry]~~ earthen wall systems shall conform to the requirements of Appendix A of TMS 402, except where otherwise noted in this section.

2109.1.1 Limitations. The use of empirical design of earthen wall systems ~~[adobe masonry]~~ shall be limited as noted below [in Section A.1.2 of TMS 402]. In buildings that exceed one or more of the limitations below [of Section A.1.2 of TMS 402], ~~[masonry]~~ earthen wall systems shall be designed in accordance with the engineered design provisions of Section 2101.2 ~~[or the foundation wall provisions of Section 1807.1.5].~~

[Section A.1.2.2 of TMS 402 shall be modified as follows:

A.1.2.2 Wind. Empirical requirements shall not apply to the design or construction of masonry for buildings, parts of buildings, or other structures to be located in areas where V_{asd} ~~as determined in accordance with Section 1609.3.1 of the *International Building Code*~~ exceeds 110 mph.]

2109.1.1.1 Gravity Loads. The resultant of gravity loads shall be placed within the center third of the wall thickness and within the central area bounded by lines at one-third of each cross-sectional dimension of foundation piers.

2109.1.1.2 Seismic. Empirically designed earthen wall systems are not permitted for buildings, parts of buildings or other structures in Seismic Design Categories B,C,D,E or F as defined in ASCE 7.

2109.1.1.3 Wind. Empirically designed earthen wall systems are not permitted for buildings, parts of buildings or other structures where the basic wind speed exceeds 115 mph (51 mps).

2109.1.1.4 Risk category. Empirically designed earthen wall systems are not permitted for buildings, parts of buildings or other structures in Risk Category IV as defined in ASCE 7.

2109.1.1.5 Other horizontal loads. Empirical requirements shall not apply to earthen wall systems resisting horizontal loads other than permitted wind or seismic loads.

2109.1.1.6 Support. Empirical requirements shall not apply to earthen wall systems vertically supported on wood construction.

2109.1.1.7 Below grade. Earthen construction shall not be permitted for use in foundations, footings, retaining walls or in any building element at or below grade.

2109.1.1.8 Height and area. Empirically designed earthen construction shall be limited to buildings or parts of buildings with a braced wall height not exceeding 9 feet (2.74 m) and an enclosed area less than or equal to 1600 square feet (150 m²).

Exception: For buildings of empirically designed earthen construction when designed by a registered design professional, wall height limitation shall be increased to a maximum of 35 feet (10.6 m) as measured from the average specified finish grade adjacent to the wall and area limitations shall not apply.

2109.2 [Adobe] Earthen construction. [Adobe] Earthen construction shall comply with this section and shall be subject to the requirements of this code for Type V construction, Appendix A of TMS 402 and this section.

2109.2.1 Unstabilized [adobe] earthen construction. Unstabilized [adobe] earthen construction shall comply with Sections 2109.2.1.1 through 2109.2.1.5[4].

2109.2.1.1 Characteristic [C]compressive strength, f_c . [Adobe] Earthen construction units shall have an average characteristic compressive strength as required by design but not less than 150 psi (1034 kPa). [of 300 psi (2068 kPa) when tested in accordance with ASTM C67.] Five samples shall be tested in accordance with ASTM C67 and characteristic compressive strength for each unit shall be determined by multiplying the result by the correction multiplier provided in Table 2109.2.1.1. [and individual unit are not] No individual unit is permitted to have a characteristic compressive strength of less than 125 psi (862 kPa). [250 psi (1724 kPa)].

TABLE 2109.2.1.1
PRISM STRENGTH CORRECTION FOR CHARACTERISTIC COMPRESSIVE STRENGTH, f'_e

Test Unit Height to Least Width Ratio H/W	ASTM C67 Correction Multiplier
≤0.5	0.50
0.70	0.60
1	0.70
1.5	0.75
2	0.77
3	0.95
4	1.00

2109.2.1.2 Modulus of rupture. ~~[Adobe]~~ Earthen construction units shall have an average modulus of rupture of not less than 50 psi (345 kPa) when tested in accordance with the following procedure. Five samples shall be tested and individual units shall not have a modulus of rupture of less than 35 psi (241 kPa).

~~**[2109.2.1.3 Moisture content requirements.**~~ Adobe units shall have a moisture content not exceeding 4 percent by weight.]

~~**[2109.2.1.4 Shrinkage cracks.**~~ Adobe units shall not contain more than three shrinkage cracks and any single shrinkage crack shall not exceed 3 inches (76 mm) in length or 1/8 inch (3.2 mm) in width.]

2109.2.1.3 Condition of units. Adobe masonry and compressed earth block units used in load-bearing construction shall be whole and sound and not more than 10% of the bearing surface shall be missing or chipped. The basic unit competence of any questionable units shall be assessed by the ability to be dropped to a hard level surface from a height of not less than 24 in (609 mm) without fracture or delamination.

2109.2.1.4 Organic matter. Organic matter present in soils used for earthen construction shall be limited to not more than 5% as measured by AASHTO T267 Loss-on-Ignition Test.

Exception: Limits on organic matter content shall not apply to adobe masonry units.

2109.2.1.5 Soil acidity (pH). Prior to use in earthen construction, native soil acidity shall not be less than pH 7.0 as measured by ASTM D4972. Soil pH less than 7.0 shall be treated by thorough mixing with lime to raise pH to an acceptable level prior to use.

2109.2.2 Stabilized ~~adobe~~ earthen construction. Stabilized earthen construction ~~adobe~~ shall additionally comply with [Section 2109.2.1 for unstabilized adobe in addition to] Section[s] 2109.2.2.1 [and 2109.2.2.2].

2109.2.2.1 Soil requirements. Soil used for stabilized earthen construction ~~adobe units~~ shall be volumetrically stable and chemically compatible with the stabilizing material.

[2109.2.2.2 Absorption requirements. A 4 inch (102 mm) cube, cut from a stabilized adobe unit dried to a constant weight in a ventilated oven at 212°F to 239°F (100°C to 115°C), shall not absorb more than 2½ percent moisture by weight when placed on a constantly water-saturated, porous surface for seven days. Not fewer than five specimens shall be tested and each specimen shall be cut from a separate unit.]

2109.2.3 Allowable stress. For empirically designed earthen construction, ~~[T]~~the allowable compressive stress on gross cross-sectional area of a unit or sample ~~[adobe]~~ shall not exceed 30 psi (207 kPa).

Table 2109.2.3.1, ALLOWABLE SHEAR ON BOLTS IN ADOBE MASONRY, is amended to reflect changes to the title. Unaltered sections of the Table remain in full force:

**TABLE 2109.2.3.1
ALLOWABLE SHEAR ON BOLTS IN ~~[ADOBE]~~ EARTHEN CONSTRUCTION MASONRY**

2109.2.4 Detailed requirements. ~~[Adobe]~~ Earthen construction shall comply with Sections 2109.2.4.2~~[1]~~ through 2109.2.4.9.

~~[2109.2.4.1 Number of stories.~~ ~~Adobe construction shall be limited to buildings not exceeding one story, except that two-story construction is allowed where designed by a registered design professional.]~~

2109.2.4.2 Mortar. Mortar for adobe masonry and compressed earth blocks ~~[construction]~~ shall comply with Sections 2109.2.4.2.1 and 2109.2.4.2.2.

2109.2.4.2.1 General. Mortar for use in earthen construction ~~[adobe units]~~ shall be ~~[in accordance with Section 2103.2.1, or be]~~ composed of ~~[adobe]~~ soil of ~~[the same]~~ like composition and stabilization as the ~~[adobe brick]~~ earthen construction units. ~~[Unstabilized adobe soil mortar is permitted in conjunction with unstabilized adobe brick units.]~~

2109.2.4.2.2 Mortar joints. Adobe masonry and compressed earth block units shall be laid with full head and bed joints and in full running bond of minimum ¼ unit overlap.

2109.2.4.3 Parapet walls. Parapet walls shall be constructed of stabilized earthen construction materials only. Parapet walls shall include flashing as described in Section 1404.4. ~~[constructed of adobe units shall be waterproofed.]~~

2109.2.4.4 Wall thickness. For empirically designed earthen construction, ~~[T]~~the minimum thickness of exterior walls in one-story buildings shall be 10 inches (254 mm). The walls shall be laterally supported at intervals not exceeding 24 feet (7315 mm). The minimum thickness of interior load-bearing walls shall be 8 inches (203 mm). The unsupported height of any wall of earthen construction ~~[constructed of adobe units]~~ shall not exceed 10 times the thickness of such wall.

2109.2.4.5 Foundations. Foundations for earthen ~~[adobe]~~ construction shall be in accordance with Section 2109.2.4.5.1 through ~~[and]~~ 2109.2.4.5.2~~[5]~~.

2109.2.4.5.1 Foundation support. Load-bearing and nonload-bearing ~~[W]~~walls ~~[and partitions]~~ constructed of ~~[adobe units]~~ earthen construction shall be supported by continuous footings and foundations. Width of foundation walls shall not be less than the width of earthen construction walls which they support. ~~[foundations or footings that extend not less than 6 inches (152 mm) above adjacent ground surfaces and are constructed of solid masonry (excluding adobe) or concrete. Footings and foundations shall comply with Chapter 18.]~~

2109.2.4.5.2 Lower course requirements. ~~[Stabilized adobe units shall be used in adobe walls for the first 4 inches (102 mm) above the finished first-floor elevation.]~~ The lowest course of any wall of unstabilized adobe masonry units shall be stabilized.

2109.2.4.5.3 Height above grade. Foundation walls for earthen construction shall extend not less than 6 inches (152 mm) above adjacent finish grade.

2109.2.4.5.4 Damp-proofing. The lowest course of earthen construction shall be protected with a continuous damp-proofing barrier applied directly to the full width of the bearing surface of foundation walls. Maximum permeance of damp-proofing barrier shall be IBC Class I or II with a perm moisture rating of not more than 0.5 perm.

Exception: Damp-proofing may be held back a maximum of ¾ inches (20mm) at interior surfaces of walls not exposed to weather.

2109.2.4.5.5 Site Drainage. Grade surfaces adjacent to earthen wall systems shall be designed to provide adequate flow of water away from the foundation.

2109.2.4.6 Isolated piers or columns. ~~[Adobe units]~~ Earthen construction shall not be used for isolated piers or columns in a load-bearing capacity. Walls with a length less than the greater of three (3) times the wall thickness or [less than] 24 inches (610 mm) [in length] shall be considered to be isolated piers or columns.

2109.2.4.7 Tie beams. Exterior walls and interior load-bearing walls constructed of [adobe units] earthen construction shall have a continuous tie beam at the level of the floor or roof bearing and meeting the following requirements.

2109.2.4.8 Exterior finish. Exterior walls constructed of unstabilized [adobe units] earthen construction shall have their exterior surface covered with no[t] fewer than two coats of vapor-permeable mineral based [Portland cement] plaster having a minimum thickness of ¾ inch (19.1 mm) and conforming to ASTM C926. Where lathing is used as the method of plaster attachment, lathing shall be of galvanized stucco netting anchored [Lathing shall comply with ASTM C106. Fasteners shall be spaced] at 16 inches (406 mm) on center maximum with galvanized fasteners. Exposed wood surfaces shall be treated with an *approved* wood preservative or other protective coating prior to lath application.

SECTION 3109, SWIMMING POOL ENCLOSURES AND SAFETY DEVICES, is repealed and replace with a new SECTION 3109 to read as follows:

SECTION 3109 **SWIMMING POOL ENCLOSURES AND SAFETY DEVICES**

3109.1 General. The design and construction of swimming pools and spas shall comply with the following requirements.

3109.2 Barrier requirements. The provisions of this section shall apply to the design of barriers for restricting entry into areas having pools and spas. Where spas or hot tubs are equipped with a lockable safety cover complying with ASTM F1346 and swimming pools are equipped with a powered safety cover that complies with ASTM F1346, the areas where those spas, hot tubs or pools are located shall not be required to comply with Sections 3109.3 through 3109.5.

3109.3 Outdoor swimming pools and spas. Outdoor pools and spas and indoor swimming pools shall be surrounded by a barrier that complies with Sections 3109.3.1 through 3109.5.

3109.3.1 Barrier height and clearances. ~~Barrier heights and clearances shall be in accordance with all of the following:~~

- ~~1. The top of the barrier shall be not less than 48 inches (1219 mm) above grade where measured on the side of the barrier that faces away from the pool or spa. Such height shall exist around the entire perimeter of the barrier and for a distance of 3 feet (914 mm) measured horizontally from the outside of the required barrier.~~
- ~~2. The vertical clearance between grade and the bottom of the barrier shall not exceed 2 inches (51 mm) for grade surfaces that are not solid, such as grass or gravel, where measured on the side of the barrier that faces away from the pool or spa.~~
- ~~3. The vertical clearance between a surface below the barrier to a solid surface, such as concrete, and the bottom of the required barrier shall not exceed 4 inches (102 mm) where measured on the side of the required barrier that faces away from the pool or spa.~~
- ~~4. Where the top of the pool or spa structure is above grade, the barrier shall be installed on grade or shall be mounted on top of the pool or spa structure. Where the barrier is mounted on the top of the pool or spa, the vertical clearance between the top of the pool or spa and the bottom of the barrier shall not exceed 4 inches (102 mm).~~

3109.3.2 Openings. ~~Openings in the barrier shall not allow passage of a 4-inch-diameter (102 mm) sphere.~~

3109.3.3 Solid barrier surfaces. ~~Solid barriers that do not have openings shall not contain indentations or protrusions that form handholds and footholds, except for normal construction tolerances and tooled masonry joints.~~

3109.3.4 Mesh fence as a barrier. ~~Mesh fences, other than chain link fences in accordance with Section 3109.3.7, shall be installed in accordance with the manufacturer's instructions and shall comply with the following:~~

- ~~1. The bottom of the mesh fence shall be not more than 1 inch (25 mm) above the deck or installed surface or grade.~~
- ~~2. The maximum vertical clearance from the bottom of the mesh fence and the solid surface shall not permit the fence to be lifted more than 4 inches (102 mm) from grade or decking.~~
- ~~3. The fence shall be designed and constructed so that it does not allow passage of a 4-inch (102 mm) sphere under any mesh panel. The maximum vertical clearance from the bottom of the mesh fence and the solid surface shall be not greater than 4 inches (102 mm) from grade or decking.~~
- ~~4. An attachment device shall attach each barrier section at a height not lower than 45 inches (1143 mm) above grade. Common attachment devices include, but are not limited to, devices that provide the security equal to or greater than that of a hook-and-eye-type latch incorporating a spring-actuated retaining lever such as a safety gate hook.~~
- ~~5. Where a hinged gate is used with a mesh fence, the gate shall comply with Section 3109.4.~~
- ~~6. Patio deck sleeves such as vertical post receptacles that are placed inside the patio surface shall be of a nonconductive material.~~

3109.3.5 Closely spaced horizontal members. ~~Where the barrier is composed of horizontal and vertical members and the distance between the tops of the horizontal members is less than 45 inches (1143 mm), the horizontal members shall be located on the pool or spa side of the fence. Spacing~~

~~between vertical members shall not exceed 1 3/4 inches (44 mm) in width. Where there are decorative cutouts within vertical members, spacing within the cutouts shall not exceed 1 3/4 inches (44 mm) in width.~~

~~**3109.3.6 Widely spaced horizontal members.** Where the barrier is composed of horizontal and vertical members and the distance between the tops of the horizontal members is 45 inches (1143 mm) or more, spacing between vertical members shall not exceed 4 inches (102 mm). Where there are decorative cutouts within vertical members, the interior width of the cutouts shall not exceed 1 3/4 inches (44 mm).~~

~~**3109.3.7 Chain link dimensions.** The maximum opening formed by a chain link fence shall be not more than 1 3/4 inches (44 mm). Where the fence is provided with slats fastened at the top and bottom that reduce the openings, such openings shall be not greater than 1 3/4 inches (44 mm).~~

~~**3109.3.8 Diagonal members.** Where the barrier is composed of diagonal members, the maximum opening formed by the diagonal members shall be not greater than 13 / 4 inches (44 mm). The angle of diagonal members shall be not greater than 45 degrees (0.79 rad) from vertical.~~

~~**3109.4 Gates.** Access gates shall comply with the requirements of Sections 3109.4.1 through 3109.4.3 and shall be equipped to accommodate a locking device. Pedestrian access gates shall open outward away from the pool or Spa, shall be self-closing and shall have a self-latching device.~~

~~**3109.4.1 Utility or service gates.** Gates not intended for pedestrian use, such as utility or service gates, shall remain locked when not in use.~~

~~**3109.4.2 Double or multiple gates.** Double gates or multiple gates shall have not fewer than one leaf secured in place and the adjacent leaf shall be secured with a self-latching device. The gate and barrier shall not have openings larger than 1 / 2 inch (12.7 mm) within 18 inches (457 mm) of the latch release mechanism. The self-latching device shall comply with the requirements of Section 3109.4.3.~~

~~**3109.4.3 Latches.** Where the release mechanism of the self-latching device is located less than 54 inches (1372 mm) from grade, the release mechanism shall be located on the pool or spa side of the gate not less than 3 inches (76 mm) below the top of the gate, and the gate and barrier shall not have openings greater than 1 / 2 inch (12.7 mm) within 18 inches (457 mm) of the release mechanism.~~

~~**3109.5 Structure wall as a barrier.** Where a wall of a dwelling or structure serves as part of the barrier and where doors provide direct access to the pool or spa through that wall, one of the following shall be required:~~

- ~~1. Operable doors shall have an alarm that produces an audible warning when the door or their screens are opened. The alarm shall be listed and labeled as a water hazard entrance alarm in accordance with UL 2017. In dwellings or structures not required to be Accessible units, Type A units or Type B units, the operable parts of the alarm deactivation switches shall be located 54 inches (1372 mm) or more above the finished floor. In dwellings or structures required to be Accessible units, Type A units or Type B units, the operable parts of the alarm deactivation switches shall be located not greater than 54 inches (1372 mm) and not less than 48 inches (1219 mm) above the finished floor.~~
- ~~2. A safety cover that is listed and labeled in accordance with ASTM F1346 is installed for the pools and spas.~~

~~3. An approved means of protection, such as self-closing doors with self-latching devices, is provided. Such means of protection shall provide a degree of protection that is not less than the protection afforded by Item 1 or 2.~~

Section 3306.7, Covered walkways, is amended by adding an exception "B" to read as follows:

3306.7 Covered walkways. Covered walkways shall have a clear height of not less than 8 feet (2438 mm) as measured from the floor surface to the canopy overhead. Adequate lighting shall be provided at all times. Covered walkways shall be designed to support all imposed loads. The design live load shall be not less than 150 psf (7.2 kN/m²) for the entire structure.

Exception A: Roofs and supporting structures of covered walkways for new, light-frame construction not exceeding two stories above grade plane are permitted to be designed for a live load of 75 psf (3.6 kN/m²) or the loads imposed on them, whichever is greater. In lieu of such designs, the roof and supporting structure of a covered walkway are permitted to be constructed as follows:

1. Footings shall be continuous 2-inch by 6-inch (51 mm by 152 mm) members.
2. Posts not less than 4 inches by 6 inches (102 mm by 152 mm) shall be provided on both sides of the roof and spaced not more than 12 feet (3658 mm) on center.
3. Stringers not less than 4 inches by 12 inches (102 mm by 305 mm) shall be placed on edge upon the posts.
4. Joists resting on the stringers shall be not less than 2 inches by 8 inches (51 mm by 203 mm) and shall be spaced not more than 2 feet (610 mm) on center.
5. The deck shall be planks not less than 2 inches (51 mm) thick or wood structural panels with an exterior exposure durability classification of at least 23/32 inch (18.3 mm) thick nailed to the joists.
6. Each post shall be knee braced to joists and stringers by members not less than 2 inches by 4 inches (51 mm by 102 mm); 4 feet (1219 mm) in length.
7. A curb that is not less than 2 inches by 4 inches (51 mm by 102 mm) shall be set on edge along the outside edge of the deck.

Exception B: Pedestrian canopies for construction or demolition of buildings not exceeding 36 feet (10.97 m) in height or three stories, whichever is less, may be constructed of metal scaffolds of two-inch (51 mm) tubing adequately braced by 1.25 inch (32 mm) tubing. The passageway shall not be less than 39 inches (991 mm) in width at any point with a head room of not less than eight feet (2.44 m). The scaffold ends shall be braced by approved diagonal cross bracing maintaining a maximum of eight feet (2.44 m) between ends. A solid, tightly sheathed cover between scaffold and job site to be not less than 0.5 inch (12.7 mm) ply board with railing when required by this section. The roof shall be tightly sheathed with a minimum of two-inch (51 mm) nominal wood planking.

APPENDIX H, SIGNS, is amended as follows:

SECTION H101, GENERAL, SECTION H102, DEFINITIONS, SECTION H103, LOCATION, SECTION H104, IDENTIFICATION, SECTION H113, MARQUEE SIGNS, and SECTION H114, PORTABLE SIGNS, are repealed. See Chapter 28, San Antonio Code, for additional requirements.

Section H105.2, Permits, drawings and specifications, is amended to read as follows:

H105.2 Permits, drawings and specifications. Where a permit is required, as provided in Article I of this chapter [Chapter 4], submittal documents consisting of construction documents, engineering calculations and other data shall be submitted in two or more sets with each permit application. ~~[shall be required.]~~ These documents shall show the dimensions, material and required details of construction, including loads, stresses and anchors. The submittal documents shall also be

accompanied by the written consent of the owner or lessee of the premises upon which the sign is to be erected. The construction documents and engineering calculations shall be prepared by a Texas registered professional engineer and shall be signed and sealed.

Exception. Construction documents identified above will not be required to be stamped and sealed by a Texas registered professional engineer for the following conditions unless otherwise required by the *Building Official* because of unusual design or site conditions:

1. Pole signs that are 12 feet (3.66 m) or less in height.
2. Monument signs that are eight feet (2.44 m) or less in height.
3. Wall signs that weigh 600 lbs. (272 kg) or less.
4. Channel letters that weigh 7.5 psf (359.1 N/m²) or less.

Section H107, COMBUSTIBLE MATERIALS, is amended by repealing Sections H107.1.2, Electric sign faces, and H107.1.3, Area limitation.

Section H109, GROUND SIGNS, is amended by repealing Section H109.1, Height restrictions, and Section H109.2, Required clearance.

Section H110, ROOF SIGNS, is amended by repealing Section H110.3, Height of solid signs, Section H110.4, Height of open signs, and Section H110.5, Height of closed signs.

Section H112, PROJECTING SIGNS, is amended by repealing Section H112.4, Height limitation.

Sec. 10-31. - Fee schedule.

Development services establishes minimum values for the cost of commercial construction based upon the costs per square foot as published and updated by the International Code Council and used with the Army Corp of Engineers' modifier for the city. This value is established at the time the building plans are submitted. Additional valuation checks may be performed by the plans examiners during their review of the plans.

Commercial Plan Review Fees	
Valuation \$0—\$1,000	\$100.00
Valuation \$1,001—\$200,000	\$100.00+\$1.60/\$1,000, or fraction thereof, over \$1,000
Valuation \$200,001—\$1,000,000	\$418.40+\$1.50/\$1,000, or fraction thereof, over \$200,000
Valuation \$1,000,001—\$5,000,000	\$1,618.40+\$0.75/\$1,000, or fraction thereof, over \$1,000,000
Valuation \$5,000,001+	\$4,618.40+\$0.50/\$1,000, or fraction thereof, over \$5,000,000
School District Plan Reviews:	
School districts with school district projects valued at over five hundred thousand dollars (\$500,000.00) shall be entitled to a twenty-five (25) percent waiver of plan review and permit fees, but in no case	

shall said school district pay less than a minimum fee of eight hundred sixty-eight dollars and forty cents (\$868.40) for plan review, one thousand four hundred ten dollars (\$1,410.00) for building permit, and one hundred thirty-six dollars and seventy cents (\$136.70) for the related surcharges.	
Landscape Plan Review	
Base fee	\$27.50
Plus 11% of the Building Plan Review Fee	
Commercial Irrigation Plan Review	\$100.00
Commercial Swimming Pool Plan Review Fee	(based upon valuation)
Pool Commercial Landscape Plan Review	
Base fee	\$27.50
Plus 11% of the Building Plan Review Fee	
Commercial Permit Fees	
Valuation: \$0—\$1,000	\$100.00
Valuation: \$1,001—\$25,000	\$100.00+\$7.28/\$1,000, or fraction thereof, over \$1000
Valuation: \$25,001—\$75,000	\$274.87+\$5.72/\$1,000, or fraction thereof, over \$25,000
Valuation: >75,000	\$560.00+\$2.00/\$1,000, or fraction thereof, over \$75,000
School District Plan Reviews:	
School districts with school district projects valued at over five hundred thousand dollars (\$500,000.00) shall be entitled to a twenty-five (25) percent waiver of plan review and permit fees, but in no case shall said school district pay less than a minimum fee of eight hundred sixty-eight dollars and forty cents (\$868.40) for plan review, one thousand four hundred ten dollars (\$1,410.00) for building permit, and one hundred thirty-six dollars and seventy cents (\$136.70) for the related surcharges.	
Commercial Conditional Permit Fees (plus the Building Permit Fee)	\$200.00
Commercial Fence (plus Plan Review Fee)	Based Upon Building Valuation
Commercial Re-Roof (plus Plan Review Fee when applicable)	Based Upon Building Valuation
Document Management Fee	Walk Through Plans—\$10.00; School Districts—Interior Finishout—\$10.00; Retaining Walls—\$10.00; Demolition—\$10.00; 10-Day Plans—\$25.00; Site Plans

	-\$30.00; 20-Day Plans-\$50.00; 35-Day Plans-\$150.00/Roll; School Districts-New-\$150/Roll
Special Services Fees—Building Plan Review and Inspection	
Additional Plan Review (i.e. revised)—Per Reviewer (All Disciplines) per Hour (1 hour minimum)	\$100.00
Administrative Exception/ <u>Variance Request</u>	\$350.00
<u>Commercial Project Modification Request Fee per Modification Request</u> Code Variance	\$350.00
After-hour Inspection Fee (per hour with 1 hour minimum)	\$100.00
After-hours Commercial Plan Review—Per Reviewer (All Disciplines) per Hour (1 hour minimum)	\$100.00
Commercial Plan Retrieval Fee per Plan	\$100.00
Commercial Project Modification Request Fee per Modification Request	\$350.00
Commercial Walk-Through Fee for Plans over 500 Square Feet (per plan)	\$100.00
<u>Inspection for which no fee is specifically indicated (per hour with 1 hour minimum)</u>	<u>\$100.00</u>
<u>Inspection Schedule Fee (Free on-line)</u>	<u>\$3.00</u>
<u>Plan Review by Appointment Processing Fee (per appointment)</u>	<u>\$200.00</u>
<u>Plus Additional Plan Review Fee per Reviewer per hour (1 hour minimum)</u>	<u>\$100.00</u>
<u>Preliminary Plan Review</u>	
<u>Fee per Reviewer per hour and per discipline (1 hour minimum per discipline)</u>	<u>\$100.00</u>
<u>Plus Additional Plan Review Fee per Reviewer per hour and per discipline (1 hour minimum per discipline)</u>	<u>\$100.00</u>

<u>Re-inspection Fee</u>	<u>\$51.50</u>
<u>Median and turn lane review (outside of plat) per hour</u>	<u>\$100.00</u>
<u>Permit extension fee: 50% of permit (plus cost of permit)</u>	
<u>Building-related and Fire Codes Appeals and Advisory Board Fees</u>	
<u>Building-related and Fire Codes Appeal Fee</u>	<u>\$155.00</u>
<u>Certificate of Occupancy</u>	
<u>Commercial Certificate of Occupancy</u>	<u>\$200.00</u>
<u>Temporary Commercial Certificate of Occupancy</u>	<u>\$500.00</u>
<u>Temporary Commercial Certificate of Occupancy Extension</u>	<u>\$100.00</u>
<u>Expired Certificate of Occupancy Fine (basic fee plus C of O fee)</u>	<u>\$500.00</u>
<u>Fine for New Commercial Construction Occupancy without C of O</u>	<u>\$500.00</u>
<u>Fine for Existing Commercial Construction Occupancy without C of O (plus C of O Fee)</u>	<u>\$200.00</u>
<u>Miscellaneous</u>	
<u>Certificate of Occupancy Tent Fee</u>	<u>\$100.00</u>
<u>Certificate of Occupancy Mall Cart</u>	<u>\$100.00</u>
<u>Certificate of Occupancy—Name Change</u>	<u>\$50.00</u>
<u>Certificate of Occupancy—Address Correction</u>	<u>\$50.00</u>
<u>Duplicate Copy of Certificate of Occupancy (plus tax)</u>	<u>\$5.00</u>
<u>Re-inspection Fee</u>	<u>\$51.50</u>
<u>Miscellaneous Building Development Fees</u>	
<u>Permit Processing Fee</u>	<u>\$10.00</u>
<u>Building Permit ready/status letter</u>	<u>\$50.00</u>
<u>Link child-parent permits, per commercial permit</u>	<u>\$10.00</u>
<u>Permit Refund Fee</u>	<u>\$50.00</u>

<u>Permit Amendment Fee</u>	<u>\$10.00</u>
<u>Duplicate copy of City issued registration card</u>	<u>\$5.00</u>
<u>Contractor number research fee</u>	<u>\$10.00</u>
<u>Occupant load adjustment fee per hour</u>	<u>100.00</u>
<u>Building/Suite assignment fee:</u>	
<u>Building #'s (per address)</u>	<u>\$100.00</u>
<u>Suite #'s (per assigned suite #)</u>	<u>\$20.00</u>
<u>Permit Reprint Fee (subject to sales tax)</u>	<u>\$5.00</u>
<u>Name, Address or DBA Change on Permit</u>	<u>\$50.00</u>
<u>Notary Public</u>	<u>\$6.00</u>
<u>Open Permit Review Fee</u>	<u>\$3.00/Permit</u>
<u>Rental of Facility Fees: \$125/hr (daily min. fee of \$250; Max fee of \$1000); Security Personnel: \$15/hour/staff (with 1 hour minimum); DSD Staff: \$30/hour/staff (with 1 hour min.); Custodian Service: \$15/hour (with 2 hour min.)</u>	

Sec. 10-32. – New commercial fee schedule.

Inspection for which no fee is specifically indicated (per hour with 1 hour minimum)	\$100.00
Inspection Schedule Fee (Free on-line)	\$3.00
Mail-in Building Plan Fee (Processing Fee for Building Plans received in the mail) per Plan	\$500.00
Plan Review by Appointment Processing Fee (per appointment)	\$200.00
Plus Additional Plan Review Fee per Reviewer per hour (1 hour minimum)	\$100.00
Preliminary Plan Review	
Fee per Reviewer per hour and per discipline (1 hour minimum per discipline)	\$100.00
Plus Additional Plan Review Fee per Reviewer per hour and per discipline (1 hour minimum per discipline)	\$100.00
Re-inspection Fee	\$51.50
Median and turn lane review (outside of plat) per hour	\$100.00
Permit extension fee: 50% of permit (plus cost of permit)	
Building-related and Fire Codes Appeals and Advisory Board Fees	
Building-related and Fire Codes Appeal Fee	\$155.00
Certificate of Occupancy	
Commercial	
Commercial Certificate of Occupancy	\$200.00
Temporary Commercial Certificate of Occupancy	\$500.00
Temporary Commercial Certificate of Occupancy Extension	\$100.00
Expired Certificate of Occupancy Fine (basic fee plus C of O fee)	\$500.00

Fine for New Commercial Construction Occupancy without C of O	\$500.00
Fine for Existing Commercial Construction Occupancy without C of O (plus C of O Fee)	\$200.00
Miscellaneous	
Certificate of Occupancy Tent Fee	\$100.00
Certificate of Occupancy Mall Cart	\$100.00
Certificate of Occupancy—Name Change	\$50.00
Certificate of Occupancy—Address Correction	\$50.00
Duplicate Copy of Certificate of Occupancy (plus tax)	\$5.00
Re-inspection Fee	\$50.00
Miscellaneous Building Development Fees	
Permit Processing Fee	\$10.00
Building Permit ready/status letter	\$50.00
Link child-parent permits in Hansen, per commercial permit	\$10.00
Permit Refund Fee	\$50.00
Permit Amendment Fee	\$10.00
Duplicate copy of City issued registration card	\$5.00
Contractor number research fee	\$10.00
Building/Suite assignment fee:	
Building #'s (per address)	\$100.00

Suite #'s (per assigned suite #)	\$20.00
Permit Reprint Fee (subject to sales tax)	\$5.00
Name, Address or DBA Change on Permit	\$50.00
Notary Public	\$6.00
Open Permit Review Fee	\$3.00/Permit
Rental of Facility Fees: \$125/hr (daily min. fee of \$250; Max fee of \$1000); Security Personnel: \$15/hour/staff (with 1 hour minimum); DSD Staff: \$30/hour/staff (with 1 hour min.); Custodian Service: \$15/hour (with 2 hour min.)	
Commercial	
Occupant load adjustment fee per hour	100.00

Sec. 10-3~~23~~—10-35. - Reserved.

ARTICLE IV. - RESIDENTIAL CODE FOR ONE- AND TWO-FAMILY DWELLINGS

Sec. 10-36. - Adoption of *International Residential Code* (~~2018~~2021).

The ~~2018~~2021 edition of the *International Residential Code for One-and-Two-family Dwellings*, promulgated by the International Code Council, Chapters 2 through 10, 12 through 23, Section P2904, Chapter 44 and Appendices J, K and Q is adopted and incorporated in this article by reference as if fully set forth, except as it is amended by the following provisions of section 10-37. Provisions of this article are in addition to the provisions of the *International Residential Code*. The following provisions coinciding with the provisions of the *International Residential Code* supersede, repeal, or delete, when indicated, the corresponding provisions of the *International Residential Code*.

All references within the model codes to any building, electrical, fuel gas, mechanical, plumbing, energy conservation, ~~or existing building~~, or swimming pool code shall be construed to be a reference to the respective building, electrical, fuel gas, mechanical, plumbing, energy conservation, ~~or existing building~~, or swimming pool code specifically adopted by reference in articles II through X~~III~~IV of this chapter.

Sec. 10-37. - Amendments to the adopted chapters and Appendices J and K of the *International Residential Code* (IRC) (~~2018~~2021).

Additions to the *International Residential Code* (IRC) are shown as underlined text. Deletions of the IRC are shown as bracketed [~~striktthroughs~~].