JH/JK
11/10/2022
Item No. 12

ORDINANCE 2022-11-10-0875

AMENDING CHAPTER 10 OF THE CITY CODE OF SAN ANTONIO, TEXAS, ENTITLED "BUILDING-RELATED CODES OF THE CITY OF SAN ANTONIO" AND CHAPTER 11 OF THE CITY CODE OF SAN ANTONIO, TEXAS, ENTITLED "FIRE PREVENTION" BY REVISING ADMINISTRATIVE PROCEDURES, ADOPTING THE 2021 EDITIONS OF THE INTERNATIONAL CODE COUNCIL, INC., BUILDING-RELATED CODES, THE 2020 NATIONAL ELECTRICAL CODE, THE 2021 EDITION OF THE INTERNATIONAL FIRE CODE AND APPENDICES, AND THEIR RESPECTIVE LOCAL AMENDMENTS, APPLYING ADMINISTRATIVE CLARIFICATION, AND PROVIDING FOR PENALTIES, PUBLICATION AND AN EFFECTIVE DATE.

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WHEREAS, the Building-Related and Fire Codes Appeals and Advisory Board is charged with reviewing and making recommendations on nationally recognized building-related codes and fire code following publication upon request by the Building Official or Fire Chief; and

WHEREAS, although delayed by the pandemic, the Development Services Department and Fire Department, as part of the triennial review process for technical construction code adoption and amendment, took proposed technical construction code and fire code adoptions and modifications through the Building-Related and Fire Codes Appeals and Advisory Board's various subcommittees for evaluation, input and any recommended revisions; and

WHEREAS, the results of these reviews were forwarded to the full Building-Related and Fire Codes Appeals and Advisory Board where public meetings were conducted regarding the 2021 editions of the International Building Code, International Residential Code for One and Two-Family Dwellings, International Mechanical Code, International Plumbing Code, International Existing Building Code, International Fuel Gas Code, International Fire Code, International Energy Conservation Code, International Swimming Pool and Spa Code and the 2020 edition of the National Electrical Code, and their respective local amendments; and

WHEREAS, the Building-Related and Fire Codes Appeals and Advisory Board recommended approval and adoption of the aforementioned codes and local amendments; and

WHEREAS, all prerequisites required by state statute and the City Charter for adoption of these code and their amendments have been satisfied; **NOW THEREFORE,**

BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF SAN ANTONIO:

SECTION 1. Chapter 10, "Building-Related Codes of the City of San Antonio" is hereby amended by repealing the existing Chapter 10 in its entirety and replacing it with a new Chapter 10, "Building-Related Codes of the City of San Antonio" as detailed in **Attachment A**, which is

incorporated herein for all purposes below, to reflect adoption of the 2021 editions of the International Building Code, International Residential Code for One and Two-Family Dwellings, International Mechanical Code, International Plumbing Code, International Existing Building Code, International Fuel Gas Code, International Fire Code, International Energy Conservation Code, International Swimming Pool and Spa Code and the 2020 edition of the National Electrical Code and their respective local amendments.

SECTION 2. Three (3) copies of these codes and local amendments hereby adopted are filed in the office of the City Clerk, pursuant to Section 17 of the Charter for permanent record and inspection. For reference purposes, certain changes to Chapters 10 and 11 are shown with either underlined (added) language or strikethrough (~~deleted~~) language.

SECTION 3. Chapter 11, Article III, Section 11-16, (c)(1) and (j)(2), "Fees for certain permits and services," is amended as stated in **Attachment B**, which is incorporated herein for all purposes.

SECTION 4. Chapter 11, Article III, Section 11-32 entitled "Adoption of the International Fire Code" is updated and amended as follows:

Sec. 11-32. - Adoption of the International Fire Code.

The 2021 edition of the International Fire Code, including Appendices B, C, D, F, I, and M developed by the International Code Council is hereby adopted by the City of San Antonio, Texas, as the fire code for the City from the effective date hereof and shall govern all activities specified therein for the purpose of prescribing regulations governing conditions hazardous to life and property from fire and explosion. The 2021 edition of the International Fire Code as adopted is incorporated by reference in this article.

SECTION 5. Chapter 11, Article III, Section 11-40 entitled "Amendments made to the 2018 International Fire Code" is hereby repealed in its entirety and replaced with a new Section 11-40 entitled "Amendments made to the 2021 International Fire Code" as detailed in **Attachment C**, which is incorporated herein for all purposes.

SECTION 6. All previous provisions of the 2018 International Building Code, International Residential Code for One and Two-Family Dwellings, International Mechanical Code, International Plumbing Code, International Existing Building Code, International Fuel Gas Code, International Fire Code, International Energy Conservation Code, International Fire Code and the 2017 edition of the National Electrical Code, and their respective local amendments as adopted by the City of San Antonio, Texas, remain in full force and effect during the period for which they were enacted.

SECTION 7. Violations occurring after the effective date of this ordinance shall be punished as provided in the revised City Code of San Antonio. Violations prior to the effective date shall be punished under the former applicable sections which shall remain in effect for that purpose.

SECTION 8. Should any Article, Section, Part, Paragraph, Sentence, Phrase, Clause, or Word of this ordinance, or any appendix, for any reason be held illegal, inoperative, or invalid, or if any exception to or limitation upon any general provision in this ordinance be held to be unconstitutional or invalid or ineffective, the remainder shall, nevertheless, stand effective and valid as if it had been enacted and ordained without the portion held to be unconstitutional or invalid or ineffective.

SECTION 9. There is no financial impact as a result of the passage of this Ordinance.

SECTION 10. No other provision of the City Code is amended by this Ordinance. All other provisions remain in effect.

SECTION 11. The City Clerk for the City of San Antonio is directed to publish notice of this Ordinance in a newspaper published in the City of San Antonio, Texas, as required by Article 2, Section 17 of the City Charter of San Antonio, Texas.

SECTION 12. The publishers of the City Code of San Antonio are authorized to amend said Code to reflect the changes adopted in this Ordinance, to correct typographical errors and to index, format and number paragraphs to conform to the existing code.

SECTION 13. This Ordinance is effective the 1st day of February, 2023.

PASSED AND APPROVED this 10th day of November, 2022.

M A Y O R

Ron Nirenberg

ATTEST:

Debbie Racca-Sittre, City Clerk

APPROVED AS TO FORM:

Andrew Segovia, City Attorney

City of San Antonio

City Council Meeting
November 10, 2022

12. **2022-11-10-0875**

Ordinance amending Chapter 10 of the City Code of San Antonio, Texas, entitled "Building-Related Codes of the City of San Antonio" and Chapter 11 of the City Code of San Antonio, Texas, entitled "Fire Prevention" by revising administrative procedures, adopting the 2021 editions of the International Code Council (ICC), Inc., Building-Related Codes, the 2020 National Electrical Code, the 2021 edition of the ICC International Fire Code and appendices, and their respective local amendments, applying administrative clarification, and providing for penalties, publication and an effective date. [Roderick Sanchez, Assistant City Manager; Michael Shannon, Director, Development Services]

Councilmember Rocha Garcia moved to approve as amended by Planning and Community Development Committee with removal of R49 ceiling insulation requirements. Councilmember Castillo seconded the motion. The motion carried by the following vote:

Aye: McKeeRodriguez, Viagran, Rocha Garcia, Castillo, Cabello Havrda, Nirenberg, Bravo
No: Pelaez, Courage
Absent: Sandoval, Perry

Councilmember Pelaez moved to separate Energy Code of ICC Chapter 10, Section 300 from the main motion. Councilmember Courage seconded the motion. The motion failed by the following vote:

Aye: Nirenberg, Pelaez, Courage
No: Bravo, McKeeRodriguez, Viagran, Rocha Garcia, Castillo, Cabello Havrda
Absent: Sandoval, Perry

Councilmember Cabello Havrda moved to approve with exception of insulation requirement recommended by staff for R49 ceiling insulation. Councilmember Courage seconded the motion. The motion carried by the following vote:

Aye: Nirenberg, McKeeRodriguez, Viagran, Rocha Garcia, Castillo, Cabello Havrda, Courage
No: Bravo, Pelaez
Absent: Sandoval, Perry

ATTACHMENT A

Chapter 10

BUILDING-RELATED CODES OF THE CITY OF SAN ANTONIO

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ARTICLE I. ADMINISTRATION AND GENERAL

Sec. 10-1. Title of chapter; designation of *Building Official.*

(a) This chapter is the *Building-related codes.* Unless otherwise indicated by its use and context, the term "this chapter" refers to this Chapter 10 including all provisions incorporated by reference in this chapter.

(b) The *Building Official* shall be known as the Director of Development services, and such term shall include his authorized representatives. Further, whenever the term or title "administrative authority," "code official," "authority having jurisdiction," "responsible official," "*Building Official*," "director" or other similar designation is used in any of the codes adopted by this chapter, it shall be construed as the Director of Development Services, or his designee and authorized representatives.

Sec. 10-2. - Purpose and scope of chapter; referenced codes.

(a) Purpose. This chapter shall be construed to secure its expressed intent, which is to provide minimum requirements to safeguard the public safety, health and general welfare, insofar as they are affected by building construction, through structural strength, adequate means of egress facilities, stability, sanitary equipment, light and ventilation, energy conservation, fire safety, and in general to promote safety to life and property from fire and other hazards incident to the construction, design, erection, installation, alteration, addition, removal, demolition, replacement, repair, location, relocation, moving, quality of materials or use and occupancy, maintenance and operation of building, structures or premises, and to provide safety to fire fighters and emergency responders during emergency operations.

(b) The purpose of this chapter is not to create or otherwise establish or designate any particular class or group of persons who will or should be especially protected or benefited by the terms of this chapter.

(c) Scope. Article I of this chapter provides the administrative procedures to be followed by all persons engaged in the construction, design, erection, installation, alteration, addition, removal, demolition, replacement, location, relocation, land disturbance, moving, quality of materials, or use and occupancy, maintenance and operation of buildings, structures, or premises, as regulated by this chapter. All references to any provisions in the administrative chapters of the referenced model codes are construed to be a reference to the provisions of Article I unless otherwise noted.

(d) Referenced codes. The other codes and standards listed in Subsections (1) through (10) and referenced elsewhere in this chapter are considered part of the requirements of this chapter to the prescribed extent of each such reference. See Article II through article XIII of this chapter.

(1) Building. The *provisions* of the *International Building Code*, as amended in Article III, apply to the construction, design, erection, installation, alteration, addition, removal, demolition, replacement, repair, location, relocation, land disturbance, moving, quality of materials, or use and occupancy of every building or structure or any appurtenances connected or attached to such buildings or structures.

Exceptions:

a. Detached one- and two-family dwellings and multiple single-family dwellings (townhouses) not more than three (3) stories above grade plane in height with a separate means of egress and their accessory structures not more than three (3) stories above grade plane in height shall comply with this code or the *International Residential Code*, as amended in Article IV of this chapter.

b. Existing buildings and structures undergoing repair, alteration, change of occupancy, addition and/or relocation of existing buildings shall be permitted to comply with the *International Existing Building Code*, as amended in Article V of this chapter.

(2) Electrical. The provisions of the *National Electrical Code*, as amended in Article VI of this chapter, shall apply to the installation of electrical systems, including alterations, repairs, replacement, equipment, appliances, fixtures, fittings, and appurtenances thereto.

(3) Mechanical. The provisions of the *International Mechanical Code*, as amended in Article VII of this chapter, shall apply to the installation, alterations, repairs, and replacement of mechanical systems, including equipment, appliances, fixtures, fittings and/or appurtenances, including ventilating, heating, cooling, air conditioning and refrigeration systems, incinerators, and other energy-related systems.

(4) Gas. The provisions of the *International Fuel Gas Code*, as amended in Article VIII of this chapter, shall apply to the installation of fuel gas piping from point of delivery, fuel gas appliances, gaseous hydrogen systems and related accessories as covered in this Code. These requirements apply to fuel gas piping systems extending from the point of delivery to the inlet connections of appliances and the installation and operation of gas appliances and related accessories. Piping system requirements shall include design, materials, components, fabrication, assembly, installation, testing, inspection and operation and maintenance.

(5) **Plumbing.** The provisions of the *International Plumbing Code*, as amended in Article IX of this chapter, shall apply to the installation, alteration, repair, relocation, addition to use or maintenance and replacement of plumbing systems, including equipment, appliances, fixtures and fittings and appurtenances. The code shall also regulate nonflammable medical gas, inhalation anesthetic, vacuum piping, nonmedical oxygen systems and sanitary and condensate vacuum collection systems.

(6) **Energy.** The provisions of the *International Energy Conservation Code*, as amended in Article X of this chapter, shall apply to all matters governing the design and construction of buildings for energy efficiency.

(7) **Property Maintenance.** The provisions of the San Antonio Property Maintenance Code shall apply to existing structures and premises; equipment and facilities; light, ventilation, space heating, sanitation, life, and fire safety hazards; responsibilities of owners, operators and occupants, and occupancy of existing premises and structures.

(8) **Fire Prevention.** The provisions of the *International Fire Code*, as amended in City Code Chapter 11, shall apply to matters affecting or relating to structures, processes and premises from the hazard of fire and explosion arising from the storage, handling or use of structures, materials or devices; from conditions hazardous to life, property or public welfare in the occupancy of structures or premises; and from the construction, extension, repair, alteration or removal of fire suppression, automatic sprinkler systems and alarm systems or fire hazards in the structure or on the premises from occupancy or operation.

(9) **Existing Buildings.** The provisions of the *International Existing Building Code*, as amended in Article V of this chapter, shall apply to matters governing the repair, alteration, change of occupancy, addition to and relocation of existing buildings.

(10) **Swimming Pool and Spa.** The provisions of the *International Swimming Pool and Spa Code*, as amended in Article XI of this chapter shall apply to matters governing the construction, alteration, movement, renovation, replacement, repair and maintenance of aquatic recreation facilities, pools, and spas.

Sec. 10-3. Applicability.

(a) **General.** When there is a conflict between a general requirement and a specific requirement, the specific requirement shall be applicable. Where, in any specific case, different sections of this chapter specify different materials, methods of construction or other requirements, the most restrictive shall govern.

(b) **Other laws.** The provisions of this chapter do not nullify any provisions of local, state, or federal law.

(c) **Application of references.** References to article or section numbers, or to provisions not specifically identified by number, shall be construed to refer to such article or section or provision of this chapter.

(d) **Referenced codes and standards.** The codes and standards referenced in this chapter shall be considered part of the requirements of this chapter to the prescribed extent of each such reference. Where differences occur between provisions of this chapter and referenced codes and standards, the provisions of this chapter shall apply.

Exception: Where enforcement of the code provisions would violate the conditions of the listing of the equipment or appliance, the conditions of the listing and manufacturer's instructions shall apply.

(e) **Partial invalidity.** In the event that any part or provision of this chapter is held to be illegal or void, this shall not have the effect of making void or illegal any of the other parts or provisions.

(f) **Existing structures.** The legal occupancy of any structure existing on the date of adoption of this chapter shall be permitted to continue without change, except as specifically covered in this chapter, the 2021 San Antonio Property Maintenance Code, or the *International Fire Code*, as amended.

(1) **Buildings not previously occupied.** A building or portion of a building that has not been previously occupied or used for its intended purpose in accordance with the laws in existence at the time of its completion shall comply with the provisions of the *International Building Code*, as amended, or *International Residential Code*, as applicable, for new construction or with any current permit for such occupancy.

(2) **Building previously occupied.** The legal occupancy of any building existing on the date of adoption of this chapter shall be permitted to continue without change, except as otherwise specifically provided in this chapter, the *International Fire code*, or the 2021 San Antonio Property Maintenance Code, or as deemed necessary by the *Building Official* for the general safety and welfare of the occupants and the public.

Sec. 10-4. Development Services Department.

(a) Enforcement agency. The Development Services Department shall be the enforcement agency for the building-related codes, and the director thereof shall be known as the *Building Official* and as the code official.

(b) Appointment. The *Building Official* shall be appointed by the city manager or the city manager's designee.

Sec. 10-5. Duties and powers of *Building Official*.

(a) General. The *Building Official* is authorized and directed to enforce the provisions of this chapter. The *Building Official* has the authority to render interpretations of this chapter and to adopt policies and procedures in order to clarify the application of its provisions. Such interpretations, policies and procedures shall be in accordance with the intent and purpose of this chapter. Such policies and procedures shall not have the effect of waiving requirements specifically provided for in this chapter. The *Building Official* shall have the power to suspend or revoke city issued certificates of license and registration for cause.

(b) Application and permits. The *Building Official* shall receive applications, review construction documents and issue permits for the erection, repair, alteration, addition, demolition, change of occupancy and relocation of buildings and structures, inspect the premises for which such permits have been issued and enforce compliance with the provisions of this chapter.

(c) Preliminary meeting under article V. When utilizing the *International Existing Building Code*, as amended in Article V, and when requested by the permit applicant or the *Building Official,* the *Building Official* shall meet with the permit applicant prior to the application for a construction permit to discuss plans for the proposed work or change of occupancy in order to establish the specific applicability of the provisions of this chapter.

Exception: Repairs and Level 1 alterations.

Building evaluation. The *Building Official* is authorized to require an existing building to be investigated and evaluated by a registered design professional based on the circumstances agreed upon at the preliminary meeting. The design professional shall notify the *Building Official* if any potential nonconformance with the provisions of this chapter is identified.

(c) Notices and orders. The *Building Official* shall issue all necessary notices or orders to ensure compliance with the provisions with this chapter.

(d) Inspections. The *Building Official* shall make all of the required inspections or may accept reports of inspection by approved agencies or individuals. Reports of such inspections shall be in writing and certified by a responsible officer of such approved agency or by the responsible individual. The *Building*

Official is authorized to engage such expert opinion as deemed necessary to report upon unusual technical issues that arise, subject to the approval of the appointing authority.

(e) Identification. The *Building Official* shall carry proper identification when inspecting structures or premises in the performance of duties under this chapter.

(f) Impersonation prohibited. A person shall not impersonate the *Building Official* or designees through the use of a uniform, identification card, badge, or any other means. Any such impersonation shall be deemed a violation of this Code.

(g) Right of entry. Where it is necessary to make an inspection to enforce the provisions of this chapter, or where the *Building Official* has reasonable cause to believe that there exists in a structure or upon a premises a condition which is contrary to or in violation of this chapter which makes the structure or premises unsafe, dangerous or hazardous, the *Building Official* is authorized to enter the structure or premises at reasonable times to inspect or perform the duties imposed by this chapter, provided that if such structure or premises be occupied that credentials be presented to the occupant and entry requested. If such structure or premises is unoccupied, the *Building Official* shall first make a reasonable effort to locate the owner or other person having charge or control of the structure or premises and request entry. If entry is refused, the *Building Official* has recourse to the remedies provided by law to secure entry.

(h) Notice of defects. The *Building Official* shall examine, or cause to be examined, every building or structure or portion thereof reported as dangerous or damaged. If such is found to be unsafe as defined in this section, the *Building Official* shall give to the owner of such building or structure written notice stating the defects thereof. This notice shall require the owner or person in charge of the building, structure, or premise, within forty-eight (48) hours to commence either the required repairs or improvements or demolition and removal of the building or structure or portions thereof. All such work shall be completed within thirty (30) days from the date of notice unless otherwise stipulated by the *Building Official*. Service of notice shall be by certified mail made upon the owner or his agent. The designated period within which said owner or agent is required to comply with the order of the *Building Official* shall begin as of the date he received such notice.

(i) Department records. The *Building Official* shall keep official records of applications received, permits and certificates issued, fees collected, reports of inspections, and notices and orders issued. Such records are retained in the official records for the period required for retention of public records.

(j) Liability. The *Building Official*, members and alternate members of the building-related and fire codes board of appeals, or employees charged with enforcement of this chapter, while acting for the city in good faith and without malice in the discharge of the duties required by this chapter or other pertinent law or ordinance, are not civilly or criminally rendered liable personally and are relieved from personal liability for any damage accruing to persons or property as a result of any act, or by reason of an act or omission in the discharge of official duties. Any suit or criminal complaint instituted against an officer or employee because of an act performed by that officer or employee in the lawful discharge of duties and under the provisions of this chapter shall be defended by legal representative of the city until the final termination of the proceedings. The *Building Official* or any subordinate shall not be liable for cost in any action, suit or proceeding that is instituted in pursuance of the provisions of this chapter.

(k) Approved materials and equipment. Materials, equipment, and devices approved by the *Building Official* shall be constructed and installed in accordance with such approval.

(1) Appliance and fixture listing. Appliances and fixtures shall be tested and listed in published reports by approved agencies and shall be installed in accordance with all instructions included as part of such listing.

(2) Used materials and equipment. The use of used materials which meet the requirements of this chapter for new materials is permitted. Used equipment and devices shall not be reused unless approved by the *Building Official*.

(l) Modifications. Whenever there are practical difficulties involved in carrying out the provisions of this chapter, the *Building Official* has the authority to grant modifications for individual cases, upon

application of the owner or owner's authorized representative, providing the *Building Official* first finds that special individual reason makes the strict letter of this chapter impractical, and the modification is in compliance with the intent and purpose of this chapter, and that such modification does not lessen health, accessibility, life and fire safety, or structural requirements. The details of action granting modifications shall be recorded and entered in the files of the Development Services Department.

(m) Alternative materials, design and methods of construction and equipment. The provisions of this chapter are not intended to prevent the installation of any material or to prohibit any design or method of construction not specifically prescribed by this chapter, provided that any such alternative has been approved. An alternative material, design or method of construction shall be approved where the *Building Official* finds that the proposed design is satisfactory and complies with the intent of the provisions of this chapter, and that the material, method or work offered is, for the purpose intended, at least the equivalent of that prescribed in this chapter in qualify, strength, effectiveness, fire resistance, durability, and safety. Where the alternative material, design or method of construction is not approved, the *Building Official* shall respond in writing, stating the reasons why the alternative was not approved.

(1) Research reports. Supporting data, where necessary to assist in the approval of materials or assemblies not specifically provided for in this chapter, shall consist of valid research reports from approved sources.

(2) Tests. Whenever there is insufficient evidence of compliance with the provisions of this chapter, or evidence that a material or method does not conform to the requirements of this chapter, or in order to substantiate claims for alternative materials or methods, the *Building Official* has the authority to require tests as evidence of compliance to be made at no expense to the city. Test methods shall be as specified in this chapter or by other recognized test standards. In the absence of recognized and accepted test methods, the *Building Official* shall approve the testing procedures. Testing shall be performed by an approved agency. Reports of such tests shall be retained by the *Building Official* for the period required for retention of public records.

Sec. 10-6. Permits.

(a) Required. Any owner or authorized agent who intends to construct, enlarge, alter, repair, move, demolish, or change the occupancy of a building or structure, to include a sign or billboard, or to erect, install, enlarge, alter, repair, remove, convert or replace any electrical, gas, mechanical or plumbing system, the installation of which is regulated by this chapter, who performs site work or causes any such work to be done, shall first make application to the *Building Official* and obtain the required permit. See chapter 28 of the City Code for additional permit requirements for signs and billboards.

(b) Annual permit. In lieu of an individual permit for each alteration to an already approved electrical, gas, mechanical or plumbing installation, the *Building Official* is authorized to issue an annual permit upon application therefor to any person, firm or corporation regularly employing one or more qualified tradespersons in the building, structure or on the premises owned or operated by the applicant for the permit. The person to whom an annual permit is issued shall keep a detailed record of alterations made under such annual permit. The *Building Official* shall have access to such records at all times, or such records shall be filed with the *Building Official* as designated.

(c) Annual electrical maintenance permit. An annual electrical maintenance permit is issued by the city to allow a property owner, property lessee or management company to employ persons qualified by this Code to maintain and make minor repairs to existing electrical systems on a property that is registered with the department. An electrical maintenance permit is not required when the property owner, property lessee or management company is registered with the city as an electrical contractor or employs a master electrician of record, registered with the city as an electrical contractor, who oversees and is responsible for the electrical maintenance.

(1) Registration of persons qualified to perform work. All persons performing electrical work under this section shall be licensed or registered as required by the city or state. All electrical

work performed under this permit must be performed by master electricians, journeyman electricians, maintenance electricians, or electrical maintenance technicians. Initial applicants for maintenance technicians will have to complete eight (8) hours of training approved by the code official.

(2) Limitations of work. Work that may be performed under this permit by an electrical maintenance technician shall be limited to the maintenance of, repair or replacement of devices or lighting fixtures, having the same characteristics as the existing devices or fixtures, in or on existing outlets and shall include, but not be limited to the following:

a. 120-volt receptacles of all types.

b. 240-volt 3-wire and 4-wire dryer and range receptacles. Replacement of these receptacles shall be limited to like configuration and amperage receptacles.

c. Replacement of overcurrent devices and safety switches of only the same voltage, current, ampere interrupting capacity (AIC) including:

1. One or two pole circuit breakers not exceeding 60-amps at 240-volts.
2. One or two pole safety switches (fused or non-fused) not to exceed 60-amps at 240-volts.
3. Fuses not to exceed 60-amps at 240-volts.

d. Photocells and time clocks not to exceed 277-volts nominal.

e. Range hoods, disposals, and dishwasher motors.

f. Interior, exterior lighting and switches not to exceed 277-volts nominal.

g. Ceiling fans on approved boxes with proper bracing.

h. Pool lights and outlets provided they are protected with GFCI and are replaced with same.

i. Doorbell transformers and wiring to other low voltage devices with 120-volt connections.

j. Bathroom-type exhaust vents.

k. Electric gate repair.

Electrical maintenance work does not include the installation of any new electrical appurtenances, apparatus, equipment, machinery, or controls beyond the scope of any existing electrical installation.

(3) Record keeping. The applicant for an electrical maintenance permit must:

a. Maintain a copy of the permit at either the site where the work is being conducted or applicant's place of business if within the city.

b. Maintain a copy of the registration card for the certified personnel either at the location where the work is performed or the applicant's place of business if within the city.

c. Maintain a record of all work performed by registered personnel for a minimum of twelve (12) months.

(d) Annual mechanical maintenance permit and annual plumbing maintenance permit for Residential Group R-2 apartment houses. An annual mechanical maintenance permit and an annual plumbing maintenance permit, or the combination of both as one annual mechanical/plumbing maintenance permit, are required for all apartment houses containing more than four (4) dwelling units where the occupants are primarily permanent in nature. In this section the term "permanent in nature" means having dwelling units where the original lease term is greater than two (2) months.

Exception: No permit is required for apartment houses that have self-contained, ductless air conditioning products that have a cooling capacity of three (3) tons or less or for individual apartment houses containing less than five (5) dwelling units each.

(1) Scope.

a. **Mechanical.** The annual mechanical maintenance permit replaces the necessity of obtaining individual permits for work performed on environmental air conditioning system, a process cooling or heating system, a commercial refrigeration system or commercial refrigeration equipment. The permit does not cover nor is a permit required for the installation, repair, or removal of the following:

1. Vent hood used in residential kitchens.
2. Portable or self-contained ductless air conditioning product that has a cooling capacity of three (3) tons or less.
3. Portable or self-contained heating product that does not require the forced movement of air outside the heating unit.
4. Environmental air conditioning equipment that is intended for temporary use and is not fixed in place.
5. Residential refrigerator, freezer, or ice machine.

b. **Plumbing.** The annual plumbing maintenance permit replaces the necessity of obtaining individual permits for work performed by an owner or maintenance technician or maintenance engineer employed by the owner who performs plumbing maintenance work incidental to and in connections with other duties.

(2) Permit holder. An annual mechanical maintenance permit for mechanical maintenance work and an annual plumbing maintenance permit for plumbing maintenance work will only be issued to the building owner/manager or their authorized agent. For properties that contain less than twenty (20) dwelling units, the permits holder may obtain one annual mechanical maintenance permit and one annual plumbing maintenance permit covering multiple locations. For properties that contain twenty (20) or more dwelling units, the permit holder shall obtain one annual mechanical maintenance and one annual plumbing maintenance permit for the dwelling units contained within the property.

(3) Annual mechanical maintenance permit and annual plumbing maintenance permit fees. These fees shall be as follows:

Annual mechanical maintenance permit fee for single location	$50.00 per permit plus $0.21 per residential apartment unit
Annual mechanical maintenance permit fee for multiple locations	$50.00 per permit plus $2.00 per residential apartment unit
Annual plumbing maintenance permit fee for single location	$50.00 per permit plus $0.21 per residential apartment unit
Annual plumbing maintenance permit fee for multiple locations	$50.00 per permit plus $2.00 per residential apartment unit
Note: Owners of apartment houses have the option of taking out a combined annual mechanical/plumbing maintenance permit. These fees shall be as follows:	
Annual mechanical/plumbing maintenance permit fee for single location	$100.00 per permit plus $0.42 per residential apartment unit
Annual mechanical/plumbing maintenance permit fee for multiple locations	$100.00 per permit plus $4.00 per residential apartment unit

(4) Record keeping. Records of all work performed under the annual mechanical maintenance permit and annual plumbing maintenance permit shall be maintained by the permits holder for no less than twelve (12) months after performing such work and shall be made available for the *Building Official*'s review upon request.

(5) Periodic inspections. Work performed under both the annual mechanical maintenance permit and the annual plumbing maintenance permit is subject to the *Building Official*'s periodic inspections. No notice will be required by the *Building Official* to make periodic inspections of equipment located on the exterior of apartment houses. For periodic inspections of equipment located on the interior of apartment houses or their rooftops, coordination shall take place with the permits holder with a minimum five (5) day notice prior to the inspections. A date and time for the inspections shall be established by the *Building Official*. Maintenance records for both interior work and exterior work shall be made available during all interior inspections.

(6) Limits of work performed under annual mechanical maintenance permit and annual plumbing maintenance permit. Work performed under these permits shall be limited as follows:

a. **Mechanical:**

1. All work required for the continued normal performance of an existing environmental air conditioning system, a process cooling or heating system, a commercial refrigeration system or a commercial refrigeration system. Work does not include the following:

   a. Total replacement of a system as defined by the Texas Administrative Code as the simultaneous replacement of the condensing unit, the evaporator coil, the furnace, if applicable, and the air handling unit, or replacement of a package system.

b. Installation or repair of a boiler or pressure vessel that must be installed in accordance with rules adopted by the commission under V.T.C.A., Health and Safety Code Chapter 755.

2. Diagnosing and repairing problems associated with air conditioning, commercial refrigeration, or process cooling or heating equipment, and remedying or attempting to remedy these problems.

b. **Plumbing:** Repair, maintenance and replacement of existing potable water piping, existing sanitary waste and vent piping, existing plumbing fixtures and existing electric water heaters.

(7) Work not covered by the annual mechanical or plumbing maintenance permit. The following work is not covered by these permits unless it is performed by either a licensed contractor or a state licensed professional engineer:

a. **Mechanical:**

1. Total replacement of a system as defined by the Texas Administrative Code as the simultaneous replacement of the condensing unit, the evaporator coil, the furnace, if applicable, and the air handling unit, or replacement of a package system.
2. Replacement of any condensing unit that is more than one-half-ton larger than the current size.
3. Replacement of any furnace that is more than thirty-five thousand (35,000) BTU's larger than the current size.
4. Replacement of any evaporator coil that is more than one-half-ton larger than the current size.
5. Extension of any duct work more than one foot.
6. Relocating any equipment to a new location more than five (5) feet from the original location.

b. **Plumbing:**

1. Cutting into fuel gas plumbing systems.
2. Installation of gas fueled water heaters.

(8) Who may perform work. The following may perform maintenance work under these permits:

a. Licensed air conditioning contractors for the mechanical maintenance permit.

b. A person licensed as an engineer under V.T.C.A., Occupational Code Chapter 1001 and who engages in air conditioning and refrigeration contracting work and/or plumbing work in connection with the business in which the person is employed but does not engage in that work for the public.

c. A person who performs air conditioning and refrigeration maintenance work and/or plumbing maintenance work if the person:

1. Is a maintenance technician or maintenance engineer and is a regular employee of the building owner/manager of the property where the work is being performed;
2. Performs the work in connection with the business in which the person is employed; and
3. The person's employer does not engage in air conditioning and refrigeration contracting for the public and/or plumbing contracting work for the public.

(e) Work exempt from permit. Exemptions from permit requirements of this chapter shall not be deemed to grant authorization for any work to be done in any manner in violation of the provisions of this chapter or any other laws or ordinances of the city or state. Permits shall not be required for the following:

(1) Building:

a. One-story detached accessory structures used as tool and storage sheds, playhouses, and similar uses, provided the floor area does not exceed three hundred (300) square feet (27.9 m^2).

b. Minor repairs to fences not over six (6) feet (1829 mm) high. Replacement of up to twenty-five (25) percent of the overall contiguous length of a fence shall constitute minor repair.

c. Oil derricks.

d. Retaining walls that are not over four (4) feet (1219 mm) in height measured from the grade level at the front of the wall to the top of the wall, unless supporting a surcharge or impounding Class I, II or IIIA liquids.

e. Water tanks supported directly on grade if the capacity does not exceed five thousand (5,000) gallons (18,925 L) and the ratio of height to diameter or width does not exceed 2:1.

f. Sidewalks and driveways not more than thirty (30) inches (762 mm) above adjacent grade, and not over any basement or story below and are not part of an accessible route.

g. Painting, papering, tiling, carpeting, cabinets, counter tops, and similar finish work.

h. Temporary motion picture, television and theater stage sets and scenery.

i. Prefabricated swimming pools accessory to a Group R-3 occupancy that are less than twenty-four (24) inches (610 mm) deep, do not exceed five thousand (5,000) gallons (18,925 L) and are installed entirely above ground.

j. Shade cloth structures constructed for nursery or agricultural purposes, not including service systems.

k. Swings and other playground equipment accessory to detached one- and two-family dwellings.

l. Window awnings supported by an exterior wall that do not project more than fifty-four (54) inches (1,372 mm) from the exterior wall and do not require additional support of Groups R-3 and U occupancies.

m. Nonfixed and movable fixtures, cases, racks, counters, and partitions not over five (5) feet nine (9) inches (1,753 mm) in height.

n. Uncovered patios not more than thirty (30) inches (762 mm) above grade or not over any basement or story below.

o. Uncovered decks accessory to one-and two-family dwellings not exceeding three hundred (300) square feet in area, that are not more than thirty (30) inches above grade at any point, are not attached to a dwelling and do not serve a required exit door.

(2) Electrical:

a. Minor repairs or maintenance work when performed by a licensed electrical contractor, the replacement of lamps or the connection of approved portable electrical equipment to approved permanently installed receptacles.

b. Replacement of a refrigeration or HVAC system motor, solenoid valves or controls associated with the motor when performed by a licensed mechanical contractor.

c. The installation of that portion of wiring and equipment for telephone, voice, data, cable TV, broadband and other types of communication systems that operate at fifty (50) volts nominal or less. Such systems shall be grounded according to the applicable provisions of Article 250 and Chapter 8 of the NEC.

d. The installation of wiring and equipment by or for the city for the purpose of generating, transmitting, and delivering service to its customers.

e. Radio and television transmitting stations: The provisions of this chapter shall not apply to electrical equipment used for radio and television transmissions but do apply to equipment and wiring for a power supply and the installations of towers and antennas.

f. Temporary testing systems: A permit shall not be required for the installation for any temporary system required for the testing or servicing of electrical equipment or apparatus.

(3) Gas:

a. Replacement of any minor part that does not alter approval of equipment or make such equipment unsafe.

b. Portable LP-gas appliances and equipment of all types that is not connected to a fixed fuel piping system.

c. Installation of farm appliances and equipment such as brooders, dehydrators, dryers, and irrigation equipment.

d. Raw material (feedstock) applications except for piping to special atmosphere generators.

e. Oxygen-fuel gas cutting and welding systems.

f. Industrial gas applications using gases such as acetylene and acetylene compounds, hydrogen, ammonia, carbon monoxide, oxygen, and nitrogen.

g. Petroleum refineries, pipeline compressor or pumping stations, loading terminals, compounding plants, refinery tank farms and natural gas processing plants.

h. Integrated chemical plants or portions of such plants where flammable or combustible liquids or gases are produced by, or used in, chemical reactions.

i. LP-gas installations at utility gas plants.

j. Liquefied natural gas (LNG) installations.

k. Fuel gas piping in power and atomic energy plants.

l. Proprietary items of equipment, apparatus, or instruments such as gas-generating sets, compressors, and calorimeters.

m. LP-gas equipment for vaporization, gas mixing and gas manufacturing.

n. Temporary LP-gas piping for buildings under construction or renovation that is not to become part of the permanent piping system.

o. Installation of LP-gas systems for railroad switch heating.

p. Installation of hydrogen gas, LP-gas and compressed natural gas (CNG) systems on vehicles.

q. Except as provided in Section 401.1.1 of the IFGC as amended, gas piping, meters, gas pressure regulators and other appurtenances used by the serving gas supplier in the distribution of gas, other than undiluted LP-gas.

r. Piping systems for mixtures of gas and air within flammable range with an operating pressure greater than ten (10) psig (69 kPa gauge).

s. Portable fuel cell appliances that are neither connected to a fixed piping system nor interconnected to a power grid.

(4) ***Mechanical:***

a. Portable heating appliance.

b. Portable ventilation appliances and equipment.

c. Portable cooling units.

d. Steam, hot water, or chilled water piping within any heating or cooling equipment or appliances regulated by this Code.

e. The replacement of any minor part that does not alter approval of equipment or an appliance or make such equipment or appliance unsafe.

f. Portable evaporative coolers.

g. Self-contained refrigeration systems that contain ten (10) pounds (4.5 kg) or less of refrigerant, or that are actuated by motors of one horsepower (0.75 kW) or less.

h. Portable fuel cell appliances that are not connected to a fixed piping system and are not interconnected to a power grid.

(5) ***Plumbing:***

a. The stopping of leaks in drains, water, soil, waste, or vent pipe, provided, however, that if any concealed trap, drain pipe, water, soil, waste or vent pipe becomes defective and it becomes necessary to remove and replace the same with new material, such work shall be considered as new work and a permit shall be obtained and inspection made as provided in this chapter.

b. The clearing of stoppages or the repairing of leaks in pipes, valves or fixtures and the removal and reinstallation of water closets, provided such repairs do not involve or require the replacement or rearrangement of valves, pipes, or fixtures.

(f) Emergency repairs. Where equipment replacements and repairs must be performed in an emergency situation, the permit application shall be submitted within the next business day to the *Building Official*.

(g) Repairs. Application or notice to the Building Official is not required for ordinary repairs to structures, replacement of lamps or the connection of approved portable electrical equipment to approved permanently installed receptacles. Such repairs shall not include the cutting away of any wall, partition or portion thereof, the removal or cutting of any structural beam or load-bearing support, or the removal or change of any required means of egress, or rearrangement of parts of a structure affecting the egress requirements; nor shall ordinary repairs include addition to, alteration of, replacement or relocation of any standpipe, water supply, sewer, drainage, drain leader, gas, soil, waste, vent or similar piping, electric wiring or mechanical or other work affecting public health or general safety. When making repairs, defective material or parts shall be replaced or repaired in such a manner so as to preserve the original approval or listing.

(h) Public service agencies. A permit shall not be required for the installation, alteration or repair of generation, transmission, distribution or metering or other related equipment that is under the ownership and control of public service agencies by established right.

(i) Application for permit. To obtain a permit, the applicant shall first file an application in writing on a form furnished by the Development Services Department for that purpose. Such application shall:

(1) Identify and describe the work to be covered by the permit for which application is made.

(2) Describe the land on which the proposed work is to be done, by legal description, street address or similar description that will readily identify and definitely locate the proposed building or work.

(3) Indicate the use and occupancy for which the proposed work is intended.

(4) Be accompanied by construction documents and other information as required in section 10-8 of this chapter.

(5) State the valuation of the proposed work. Valuation shall include the cost of labor, materials, and profit.

(6) Be signed by the applicant, or the applicant's authorized agent.

(7) Give such other data and information as required by the *Building Official.*

(j) Authorization to obtain plumbing permits. The following lists those individuals, contractors and companies that are authorized to obtain plumbing permits:

(1) Any duly licensed (RMP) Responsible Master plumber registered with a company.

(2) Any homeowner performing plumbing work on a homestead wherein he/she resides. The installation must be made by the homeowner without the assistance of any person or persons.

(3) (TCEQ) 30 TAC 344 Licensed irrigators, who have a state irrigators license, for the installation of backflow devices for irrigation systems.

(4) Water softener companies that hold a Class III Texas Commission of Environmental Quality (TCEQ) license for the installation or change out of water softeners and associated equipment.

(5) Licensed fire line contractors for backflow devices on fire lines.

(6) Plumbing work performed by anyone who is regularly employed or acting as a maintenance man or maintenance engineer, incidental to and in connection with the business in which he is employed or engaged, and who does not engage in plumbing work for the general public. See state licensing law for definition of maintenance person or maintenance engineer.

Exceptions:

a. Any person who is employed by the railroad for plumbing work done upon the premises or equipment of the railroad, and who does not engage in plumbing work for the general public.

b. Any person engaged by any public service company for plumbing work in connection with laying, maintaining and the operation of its service mains or lines and the installation, alteration, adjustment, repair, removal, or renovation of all types of appurtenances, equipment and appliances directly related to public service companies, properties and/or jurisdiction.

(7) Gas work performed by a certified LP gas installer licensed under V.T.C.A., Natural Resources Code chapter 113.

(8) (OSSF) On-site Sewage Facility companies that hold an (OSSF Installer I or Installer II) Texas Commission of Environmental Quality (TCEQ) license for installation of (OSSF) On-Site Sewage Facilities and associated equipment, to secure a Sewer Permit to install the Sewer line from the building drain to the OSSF tank.

(k) Insurance. Before any person shall engage in plumbing work within the city, such person shall provide a certificate of insurance issued by an insurance company authorized and admitted to do business in the state for commercial general liability insurance and products completed operations coverage for master plumber for claims for property damage or bodily injury, regardless of whether the claim arises

from a negligence claim or on a contract claim, and shall be in a coverage amount of not less than three hundred thousand dollars ($300,000.00) for all claims arising in any one-year period. Further, any persons engaged in plumbing work shall indemnify and hold harmless the city from any and all damages, claims, liens, or losses, including, but not limited to personal injury or death and property damage, arising from any acts or omission of any character whatsoever caused by such person, his agents, or employees, engaged in plumbing work.

(l) Action on application. The *Building Official* shall examine or cause to be examined application for permits and amendments thereto within a reasonable time after filing. Such applications may be reviewed by other departments of the city to verify compliance with any applicable laws and ordinances under their jurisdiction. If the application or the construction documents do not conform to the requirements of the pertinent laws, the *Building Official* shall reject such application in writing, stating the reasons for the rejection. If the *Building Official* is satisfied that the proposed work conforms to the requirements of this chapter and applicable laws and ordinances, and that fees specified in ordinances adopted by the city have been paid, the *Building Official* shall issue a permit for the work as soon as practicable. No building permit shall be issued where there is not a supply of approved water for domestic or fire protection use, and adequate to the purposes for which the property is intended to be used, and where there is not an all-weather road surface adequate to withstand the weight of a fire truck.

(m) Time limitation of application. An application for a permit for any proposed work shall be deemed to have been abandoned one hundred eighty (180) days after the date of filing, unless such application has been pursued in good faith or a permit has been issued, except that the *Building Official* is authorized to grant one or more extensions of time for additional periods not exceeding ninety (90) days each. The extension shall be requested in writing and justifiable cause demonstrated.

(n) Validity of permit. The issuance or granting of a permit shall not be construed to be a permit for, or an approval of, any violation of any of the provisions of this chapter or of any other ordinance of the city. Permits presuming to give authority to violate or cancel the provisions of this chapter or other ordinances of the city shall not be valid. The issuance of a permit based on construction documents and other data shall not prevent the *Building Official* from requiring the correction of errors in the construction documents and other data. The *Building Official* is also authorized to prevent occupancy or use of a structure where in violation of this chapter or of any other ordinances of the city.

(o) Expiration. Every permit issued shall become invalid unless the work on the site authorized by such permit is commenced within one hundred eighty (180) days after its issuance, or if the work authorized on the site by such permit is suspended or abandoned for a period of one hundred eighty (180) days after the time the work is commenced. The *Building Official* is authorized to grant, in writing, one or more extensions of time, for periods not more than one hundred eighty (180) days each. The extension shall be requested in writing and justifiable cause demonstrated.

(p) Construction Noise. All noise produced by the erection, including construction, excavation, demolition, alteration, or repair work, or the permitting or causing thereof, of any building or other structure, shall meet the requirements of Section 21-52 (a)(6) of the City Code. Observed violations will result in criminal and/or civil citations per Section 21-58(b), suspension and revocation of the permit as follows:

- First violation will result in a citation.
- Second violation will result in a citation, and the *Building Official* may suspend the permit for 10 days. A compliance agreement shall be signed by contractor and property owner outlining that they will not violate this section again for this project. The signed agreement shall be provided to the *Building Official* no later than 3 business days of the second violation.
- Third violation will result in a citation, and the *Building Official* may revoke the permit.

Per Section 21-52(a)(6)(b), the *Building Official* can issue *Waivers* to perform work during hours not approved per Section 21-52(a)(6)(a).

(q) Suspension or revocation. The *Building Official* is authorized to suspend or revoke a permit issued under the provisions of this chapter whenever the permit is issued in error or on the basis of incorrect, inaccurate, or incomplete information, or in violation of any ordinance or regulation or any of the provisions of this chapter.

(r) Placement of permit. The building permit or copy shall be kept on the site of the work until the completion of the project.

(s) Demolition permit. See section 10-119 of this chapter.

(t) House moving permit. See section 10-120 of this chapter.

Sec. 10-7. Floor and roof design loads.

(a) Live loads posted. Where the live loads for which each floor or portion thereof of a commercial or industrial building is or has been designed to exceed fifty (50) psf (2.40 kN/m^2), such design live loads shall be conspicuously posted by the owner in that part of each story in which they apply, using durable signs. It shall be unlawful to remove or deface such notices.

(b) Issuance of certificate of occupancy. A certificate of occupancy required by section 10-12 shall not be issued until the floor load signs, required by section 10-7, have been installed.

(c) Restrictions on loading. It shall be unlawful to place, or cause or permit to be placed, on any floor or roof of a building, structure, or portion thereof, a load greater than is permitted by this chapter.

Sec. 10-8. Submittal documents.

(a) General. Submittal documents consisting of construction documents, statement of special inspections, geotechnical report and other data as required by the Development Services Department's application procedures shall be submitted electronically with each permit application. The construction documents shall be prepared by a registered design professional where required by this Code, the state, or any of its regulatory agencies. Where special conditions exist, the *Building Official* is authorized to require additional construction documents to be prepared by a registered design professional. Buildings, additions, and major renovations for the following occupancies shall also require a design professional to prepare the construction documents:

(1) All Group A (Assembly) occupancies.

(2) All Group E (Educational) occupancies.

(3) All Group I (Institutional) occupancies.

(4) Buildings and structures three (3) stories or more high.

(5) Buildings and structures five thousand (5,000) square feet or more in area.

(6) Electrical plans and specifications prepared by engineer. Installation or alteration of any equipment on the customer side of the CPS Energy point of delivery (service point) rated over six hundred (600) amps at two hundred fifty (250) volts or less and rated at over four hundred (400) amps at greater than two hundred fifty (250) volts, any system above six hundred (600) volts or when required by the Texas Engineering Practice Act shall have the electrical plans sealed by a professional engineer, licensed or registered with the state.

Exception: The *Building Official* is authorized to waive the submission of construction documents and other data not required to be prepared by a registered design professional if it is found that the nature of the work applied for is such that review of construction documents is not necessary to obtain compliance with this Code.

(b) Construction documents. Construction documents shall be in accordance with items (1) through (6).

(1) Information on construction documents. Construction documents shall be dimensioned and drawn to scale. Construction documents shall be of sufficient clarity to indicate the location, nature and extent of the work proposed and show in detail that it will conform to the provisions of this chapter and relevant laws, ordinances, rules, and regulations, as determined by the *Building Official*.

(2) Fire protection system shop drawings. Shop drawings for the fire protection system(s) shall be submitted to indicate conformance to this Code and the construction documents shall be approved prior to the start of system installation. Shop drawings shall contain all information as required by the referenced installation standards in Chapter 9 of the IBC, as amended. Refer also to Chapter 11 of this Code for additional requirements regarding fire protection system submittal documents and procedures.

(3) Means of egress. The construction documents shall show in sufficient detail the location, construction, size, and character of all portions of the means of egress including the path of the exit discharge to the public way in compliance with the provisions of this chapter. In other than occupancies of Groups R-2, R-3, and I-1, the construction documents shall designate the number of occupants to be accommodated on every floor, and in all rooms and spaces.

(4) Exterior wall envelope. Construction documents for all buildings shall describe the exterior wall envelope in sufficient detail to determine compliance with this chapter. The construction documents shall provide details of the exterior wall envelope as required, including flashing, intersections with dissimilar materials, corners, end details, control joints, intersections at roof, eaves, or parapets, means of drainage, water-resistive barrier, and details around openings.

The construction documents shall include manufacturer's installation instructions that provide supporting documentation that the proposed penetration and opening details described in the construction documents maintain the weather resistance of the exterior wall envelope. The supporting documentation shall fully describe the exterior wall system, which was tested, where applicable, as well as the test procedure used.

(5) Exterior balconies and elevated walking surfaces. Where balconies or other elevated walking surfaces have weather-exposed surfaces, and the structural framing is protected by an impervious moisture barrier, the construction documents shall include details for all elements of the impervious moisture barrier system. The construction documents shall include manufacturer's installation instructions.

(6) Site plan. The construction documents submitted with the application for permit shall be accompanied by a site plan showing to scale the size and location of new construction and existing structures on the site, distances from lot lines, the established street grades, and the proposed finished grades and, if applicable, flood hazard areas, floodways, and design flood elevations and it shall be drawn in accordance with an accurate boundary line survey. In the case of demolition, the site plan shall show construction to be demolished and the location and size of existing structures and construction that are to remain on the site or plot. The *Building Official* is authorized to waive or modify the requirement for a site plan when the application for permit is for alteration or repair or when otherwise warranted.

a. **Design flood elevations.** Where design flood elevations are not specified, they shall be established in accordance with Appendix F, Floodplains - Areas of Special Flood, of the Unified Development Code.

(c) Examination of documents. The *Building Official* shall examine or cause to be examined the accompanying submittal documents and shall ascertain by such examinations whether the construction indicated and described is in accordance with the requirements of this chapter and other pertinent laws or ordinances.

(1) Approval of construction documents. When the *Building Official* issues a permit, the construction documents shall be approved, in writing or by City of San Antonio watermark. The reviewed construction documents shall be retained by the *Building Official*. The applicant shall keep a copy of the approved and watermarked construction documents at the work site, and open to inspection by the *Building Official* or his duly authorized representative.

(2) Previous approvals. This chapter shall not require changes to the construction documents, construction, or designated occupancy of a structure for which a lawful permit has been issued or otherwise lawfully authorized, and the construction of which has been pursued in good faith within one hundred eighty (180) days after the effective date of this chapter and not abandoned.

(3) Phased approval. The *Building Official* is authorized to issue a permit for the construction of foundations or any other part of a building or structure before the construction documents for the whole building or structure have been submitted, provided adequate information, and detailed statements have been filed complying with pertinence requirements of this chapter. The holder of such permit for the foundation or other parts of a building or structure shall proceed at the owner's own risk with the building operation and without assurance that a permit for the entire structure will be granted.

(4) Design professional in responsible charge.

a. **General.** When documents are required to be prepared by a registered design professional, the owner or the owner's authorized agent shall engage and designate on the building permit application a registered design professional to act as the registered design professional in responsible charge. If the circumstances require, the owner or the owner's authorized agent shall designate a substitute registered design professional who shall perform the duties required of the original registered design professional in responsible charge. The *Building Official* shall be notified in writing by the owner or the owner's authorized agent if the registered design professional in responsible charge is changed or is unable to continue to perform the duties.

The registered design professional in responsible charge shall be responsible for reviewing and coordinating submittal documents prepared by others, including phased and deferred submittal items, for compatibility with the design of the building.

b. ***Deferred submittals.*** For the purposes of this section, deferred submittals are defined as those portions of the design that are not submitted at the time of application and are to be submitted to the *Building Official* within a specified period.

Deferral of any submittal items shall have the prior approval of the *Building Official*. The registered design professional in responsible charge shall list the deferred submittals on the construction documents for review by the *Building Official*.

Documents for deferred submittal items shall be submitted to the registered design professional in responsible charge who shall review them and forward them to the *Building Official* with a notation indicating that the deferred submittal documents have been reviewed and found to be in general conformance to the design of the building. The deferred submittal items shall not be installed until the deferred submittal documents have been approved by the *Building Official*.

(d) ***Amended construction documents.*** Work shall be installed in accordance with the approved construction documents, and any changes made during construction that are not in compliance with the approved construction documents shall be resubmitted for approval as an amended set of construction documents.

(e) ***Retention of construction documents.*** Approved construction documents shall be retained by the *Building Official* for a period of not less than one hundred eighty (180) days from the date of completion of the permitted work, or as required by state or local laws.

(f) ***Changes to standard tower release agreement.*** Changes to the individual control such as tenant and premise description found in the standard tower release agreement, attached to Ordinance Number 83931 as Exhibit II, do not require city council approval, provided there are no substantial changes to the standard tower lease agreement. All other substantial changes to such agreement shall require city council approval subject to approval of the office of the city attorney.

Sec. 10-9. Temporary structures and uses.

(a) General. The *Building Official* is authorized to issue a permit for temporary structures and temporary uses. Such permits shall be limited as to time of service but shall not be permitted for more than one hundred eighty (180) days. The *Building Official* is authorized to grant extensions for demonstrated cause. Chapter 11 of this Code contains additional requirements for temporary structures and uses.

(b) Conformance. Temporary structures and uses shall conform to the structural strength, fire safety, means of egress, accessibility, light, ventilation, and sanitary requirements of this chapter as necessary to ensure public health, safety, and general welfare.

(c) Temporary power. The *Building Official* is authorized to give permission to temporarily supply and use power in part of an electric installation before any such installation has been fully completed and the final certificate of completion has been issued. The part covered by the temporary certificate shall comply with the requirements specified for temporary lighting, heat, or power in Article VI of this chapter.

(d) Termination of approval. The *Building Official* is authorized to terminate such permit for a temporary structure or use and to order the temporary structure or use to be discontinued.

Sec. 10-10. Fees.

(a) Payment of fees. A permit shall not be valid until the fees prescribed by the fee schedule adopted by the city have been paid, nor shall an amendment to a permit be released until the additional fee, if any, has been paid.

(b) Schedule of permit fees. A fee for each permit shall be paid as required, in accordance with the fee schedule adopted by the city, for buildings, structures, electrical, gas, mechanical, and plumbing systems or alterations requiring a permit.

(c) Building-related permit valuations. The applicant for a permit shall provide an estimated permit value at time of application. Permit valuations include total value of work, including materials, labor, and profit for which a permit is being issued. If, in the opinion of the *Building Official*, the valuation is underestimated on the application, the permit shall be denied, unless the applicant can show detailed estimates to meet the approval of the *Building Official*. Final building-related permit valuations shall be set by the *Building Official*.

(d) Work commencing before permit issuance. Any person who commences work on a building, structure, electrical, gas, mechanical or plumbing system before obtaining the necessary permits shall be subject to double permit fees for the specified area. The payment of such double fee shall not relieve any person from fully complying with the requirements of this Code in the execution of the work nor from any other penalties prescribed in this Code.

(e) Structures being moved; inspection of buildings or structures that are located outside city limits. An inspection to determine compliance with city requirements shall be made of a building or structure on which an application to move same into the city is pending before the zoning board of adjustment. A fee shall be charged in accordance with the fee schedule adopted by the city.

(f) Re-inspection fees. The re-inspection fee charged shall be in accordance with the fee schedule adopted by the city. In instances where re-inspection fees have been assessed, all fees shall be paid before release of utilities.

(g) Refunds. The *Building Official* is authorized to establish a refund policy.

Sec. 10-11. Inspections and testing.

(a) General. Construction or work for which a permit is required is subject to inspection by the *Building Official* and such construction work shall remain accessible and exposed for inspection purposes until approved. Approval following an inspection is not an approval of a violation of the provisions of this chapter or of other ordinances of the city. Inspections presuming to give authority to violate or cancel the provisions of this chapter or of other ordinances of the jurisdiction are not valid. It is the duty of the permit applicant to cause the work to remain accessible and exposed for inspection purposes. Neither the *Building Official* nor the city are liable for expense entailed in the removal or replacement of any material required to allow inspection.

(b) Preliminary inspection. Before issuing a permit, the *Building Official* is authorized to examine or cause to be examined building, structures, and sites for which an application has been filed.

(c) Required inspections and tests. The *Building Official*, upon notification, shall make the inspections and tests set forth in paragraphs (1) through (15).

(1) Footing and foundation inspection. Footing and foundation inspections shall be made after excavations for footings are complete and any required reinforcing steel is in place. For concrete foundations, any required forms shall be in place prior to the inspection. Materials for the foundation shall be on the job, except where concrete is ready mix in accordance with ASTM C 94, the concrete need not be on the job.

(2) Underground. Underground inspections shall be made after trenches or ditches are excavated and bedded, raceways and cable or conductors installed, and before backfill is put in place. Where excavated soil contains rocks, broken concrete, frozen chunk, and other rubble that would damage or break the raceway, cable or conductors, or where corrosive action will occur, protection shall be provided in the form of granular or selected material, approved running boards, sleeves or other approved means.

(3) Concrete slab and under-floor inspections. Concrete slab and under-floor inspections shall be made after in-slab or under-floor reinforcing steel and building service equipment, conduit, piping accessories and other ancillary equipment items are in place, but before any concrete is placed or floor sheathing installed, including the subfloor.

(4) Lowest floor elevation. In flood hazard areas, upon placement of the lowest floor, including the basement, and prior to further vertical construction, the elevations certification required in Section 1612 of the IBC or Section R322 of the IRC as amended, shall be submitted to the *Building Official*.

(5) Plumbing, mechanical, gas and electrical systems inspections and tests. Concealment or rough-in inspections of plumbing, mechanical, gas and electrical systems shall be made prior to covering or concealment, before fixtures or appliances are set or installed, and prior to framing inspection.

Exception: For one- and two-family dwellings, back-filling of ground-source heat pump loop systems tested in accordance with Section M2105.28 of the 2021 IRC, as amended, prior to inspection shall be permitted.

(6) Duct test for one- and two-family dwellings and townhomes. All ducts for one- and two-family dwellings as well as townhomes, in unconditioned spaces, shall be duct tested prior to covering or concealment to disclose leaks and defects. Tests shall be made by an independent certified

RESNET energy rater or an alternative approved by the *Building Official* using objective, verifiable testing criteria and results provided to the *Building Official.* Apparatus, material, and labor required for testing a mechanical system shall be furnished by the independent certified RESNET energy rater or *Building Official* approved alternate. Where any work or installation does not pass an initial test or inspection, the necessary corrections shall be made to achieve compliance with this chapter. The work or installation shall then be re-submitted to the *Building Official* for inspection and testing. See also section R403.3 of the 2021 IECC, as amended.

(7) Frame inspection. Framing inspections shall be made after the roof deck or sheathing, all framing, fire blocking and bracing are in place and pipes, chimneys, and vents to be concealed are complete and the rough electrical, plumbing, heating wires, pipes and ducts are approved.

(8) Types IV-A, IV-B and IV-C connection protection inspection. In buildings of Types IV-A, IV-B and IV-C construction, where connection fire-resistance ratings are provided by wood cover calculated to meet the requirements of IBC Section 2304.10.1, inspection of the wood cover shall be made after the cover is installed, but before any other coverings or finishes are installed.

(9) Lath and gypsum board inspection. Lath and gypsum board inspections shall be made after the lathing and gypsum board, interior and exterior, is in place, but before any plastering is applied or any gypsum board joints and fasteners are taped and finished.

Exception: Gypsum board that is not part of a fire-resistance-rated assembly or a shear assembly.

(10) Waterproofing. Where balconies or other elevated walking surfaces have weather-exposed surfaces, and the structural framing is protected by an impervious moisture barrier, all elements of the impervious moisture barrier system shall not be concealed until inspected and approved.

Exception: Where special inspections are provided in accordance with Section 1705.1.1, Item 3.

(11) Fire- and smoke-resistant penetrations. Protection of joints and penetrations in fire-resistance-rated assemblies, smoke barriers and smoke partitions shall not be concealed from view until inspected and approved.

(12) Energy efficiency inspections. Inspections shall be made to determine compliance with chapter 4(RE) of the 2021 IECC for detached one- and two-family dwellings and multiple single-family dwellings (townhomes) as well as Group R-2, R-3 and R-4 buildings three stories or less in height above grade plane, and chapter 4(CE) of the 2021 IECC for all other occupancies, as amended, and shall include, but not be limited to, inspections for: envelope insulation R- and U-values, fenestration U-value, duct system R-value, and HVAC and water-heating equipment efficiency. For detached one and two-family dwellings and multiple single-family dwellings (townhomes) as well as Group R-2, R-3 and R-4 buildings three stories or less in height above grade plane, an independent certified RESNET energy rater or an alternative approved by the *Building Official* using objective, verifiable testing criteria, shall test and inspect the air barrier as per section R402.4 Air leakage, of the 2021 IECC. The results must be submitted on a form approved by the *Building Official.* The form shall show that construction is in compliance with the 2021 IECC.

(13) Other inspections. In addition to the inspections specified above, the *Building Official* is authorized to make or require other inspections of any construction work to ascertain compliance with the provisions of this chapter and other laws that are enforced by the Development Services Department.

a. **Prefabricated construction assembly with electrical work.**

1. **Evaluation report.** Prior to the approval of a prefabricated construction assembly having concealed electrical work and the issuance of an electrical permit, the *Building Official* requires the submittal of an evaluation report on each prefabricated construction assembly, indicating the complete details of the electrical system, including a description of the system and its components, the basis upon which the system is

being evaluated, test results and similar information, and other data as necessary for the *Building Official* to determine conformance to this chapter.

2. **Evaluation service.** The *Building Official* shall designate the evaluation service of an approved agency as the evaluation agency and review such agency's evaluation report for adequacy and conformance to this chapter.

3. **Follow-up inspection.** Except where ready access is provided to the electrical systems, service equipment and accessories for complete inspection at the site without disassembly or dismantling, the *Building Official* is authorized to conduct the in-plant inspections as frequently as necessary to ensure conformance to the approved evaluation report or shall designate an independent, approved inspection agency to conduct such inspections. The inspection agency shall furnish the *Building Official* with the follow-up inspection manual and a report of inspections upon request, and the electrical system shall have an identifying label permanently affixed to the system indicating that factory inspections have been performed.

4. **Test and inspection records.** Required test and inspection records shall be available to the *Building Official* at all times during the fabrication of the electrical system and the erection of the building, or such records as the *Building Official* designates shall be filed.

(14) Special inspections. For special inspections, see Section 1704 of the IBC, as amended.

(15) Final inspection. The final inspections shall be made after work required by building-related permits is completed. Failure to request a final inspection within thirty (30) days after the completion of a permit's work is a violation of this chapter.

(d) Inspection agencies. The *Building Official* is authorized to accept reports of approved inspection agencies, provided such agencies satisfy the requirements as to qualifications and reliability.

(e) Inspection requests. It shall be the duty of the holder of the building-related permit or their duly authorized agent to notify the *Building Official* when work is ready for inspection. It shall be the duty of the permit holder to provide access to and means for inspections of such work that are required by this chapter.

(f) Approval required. Work shall not be done beyond the point indicated in each successive inspection without first obtaining the approval of the *Building Official*. The *Building Official*, upon notification, shall make the requested inspections and shall either indicate the portion of the construction that is satisfactory as completed, or notify the permit holder or his or her agent wherein the same fails to comply with this chapter. Any portions that do not comply shall be corrected and such portion shall not be covered or concealed until authorized by the *Building Official*.

(g) Reinspection and retesting. Where any work or installation does not pass an initial test or inspection, the necessary corrections shall be made so as to achieve compliance with this chapter. The work or installation shall then be resubmitted to the *Building Official* for inspection and testing. To receive a reinspection or retest, the applicant shall make a request to the *Building Official* and pay the reinspection fee in accordance with the fee schedule prior to the inspection or test.

Sec. 10-12. Certificate of occupancy.

(a) Use and occupancy. No building or structure shall be used or occupied in whole or part, and no change in the existing use or occupancy classification of a building or structure or portion thereof shall be made, until the *Building Official* has issued a certificate of occupancy therefor as provided herein. Issuance of a certificate of occupancy shall not be construed as an approval if a violation of the provisions of this chapter or of other ordinances of the city.

Exception: Certificates of occupancy are not required for work exempt from permits under subsection 10-6(d).

(b) Certificate issued. After the *Building Official* inspects the building or structure and finds no violations of the provisions of this chapter or other laws that are enforced by the department, the *Building Official* shall issue a certificate of occupancy that contains the following:

(1) The building permit number.

(2) The address of the structure.

(3) The name and address of the owner or the owner's authorized agent.

(4) A description of that portion of the structure for which the certificate is issued.

(5) A statement that the described portion of the structure has been inspected for compliance with the requirements of this chapter for the occupancy and division of occupancy and the use for which the proposed occupancy is classified.

(6) The name of the *Building Official.*

(7) The edition of the IBC or IRC under which the permit was issued.

(8) The use and occupancy, in accordance with the provisions of Chapter 3 of the IBC.

(9) The type of construction as defined in Chapter 6 of the IBC.

(10) The design occupant load.

(11) Where an automatic sprinkler system is provided, whether the sprinkler system is required.

(12) Any special stipulations and conditions of the building permit.

(c) Temporary occupancy. The *Building Official* is authorized to issue a temporary certificate of occupancy before the completion of the entire work covered by the permit, provided that such portion or portions shall be occupied safely. The *Building Official* shall set a time period during which the temporary certificate of occupancy is valid.

(d) Revocation. The *Building Official* is authorized to suspend or revoke a certificate of occupancy or completion issued under the provisions of this chapter wherever the certificate is issued in error, or on the basis of incorrect information supplied, or where it is determined that the building or structure or portion thereof is in violation of any ordinance or regulation or any of the provisions of this chapter.

Sec. 10-13. Service utilities.

(a) Connection of service utilities. No person shall make connections from a utility, source of energy, fuel, power, water system or sewer system to any building or system that is regulated by this chapter for which a permit is required, until released by the *Building Official.*

(b) Temporary connection. The *Building Official* shall have the authority to authorize the temporary connection of the building or system to the utility, source of energy, fuel, power, water system or sewer system for the purpose of testing plumbing systems or for use under a temporary approval.

(c) Authority to disconnect service utilities. The *Building Official* has the authority to authorize disconnection of utility service to the building, structure or system regulated by the referenced codes and standards of subsection 10-2(c) of this chapter to eliminate a risk to life or property or when such utility connection has been made without the required authorization. The *Building Official* shall notify the serving utility, and wherever possible the owner or the owner's authorized agent and occupant of the building, structure, or service system of the decision to disconnect prior to taking such action. If not notified prior to disconnecting, the owner, owner's authorized agent, or occupant of the building, structure or service system shall be notified in writing, as soon as practical thereafter.

(d) Connection after order to disconnect. A person shall not make utility service or energy source connections to systems regulated by this Code which have been disconnected or ordered to be

disconnected by the code official or the use of which has been ordered to be discontinued by the code official until the code official authorizes the reconnection and use of such systems.

(e) Changing location of electric meters. If alterations of the building, dwelling, structure, or wiring require changes in the location or size of the electric meter/service equipment, a licensed electrical contractor with the city shall acquire a permit for the work to be performed and coordinate the disconnecting and reconnecting of service with the utility.

(f) Emergencies. Where life or property may be in danger, a licensed electrical contractor with the city may disconnect the electric service to the building, dwelling or structure and shall immediately notify the utility.

(g) Utility company rules. The latest edition of the CPS Energy publication, "Electrical Service Standards," as approved by the *Building Official* and adopted by city council, is hereby incorporated, and made a part of this chapter for all electric services and meter installations. All other wiring, either public or private, shall conform to this chapter.

Sec. 10-14. Building-related and fire codes appeals and advisory board.

(a) General. A building-related and fire codes appeals, and advisory board also known as the appeals and advisory board is created. The board shall hear and decide appeals of orders, decisions or determinations made by the *Building Official* or the fire chief relative to the application and interpretations of chapter 10, chapter 11, and specific articles in chapter 28 of the City Code, and in order to provide advice to the *Building Official* or fire chief on code-related matters.

(1) Members of the appeals and advisory board shall be appointed by the mayor and city council and shall hold office at its pleasure.

(2) Applications for appeal for any order, decision or determination made by the *Building Official* or the fire chief shall be filed on a form obtained from the *Building Official* within twenty-one (21) calendar days after the notice was served.

(3) A filing fee must accompany each application for appeal to the appeals and advisory board, as set forth in the fee schedule adopted by the city.

(4) The appeals and advisory board shall meet quarterly on general and codes-related matters and shall meet within fourteen (14) calendar days after either the *Building Official* or the fire chief receives an application appealing an associated order, decision, or determination relative to the application and interpretation of Chapter 10, Chapter 11 and specific articles in Chapter 28.

(5) When requested by the *Building Official* or fire chief, the appeals and advisory board shall conduct public hearings on nationally recognized building-related codes, following publication, and shall make recommendations to the *Building Official* or fire chief for adoption or local amendment.

(b) Application for appeal. An application for appeal shall be based on a claim that:

(1) The true intent of Chapters 10, 11 and specific articles in Chapter 28 or the rules legally adopted thereunder have been incorrectly interpreted;

(2) The provisions of this chapter do not fully apply; or

(3) An equally good or better form of construction is proposed.

(c) Limitation on authority.

(1) The appeals and advisory board shall have no authority to waive requirements of Chapters 10, 11 or 28.

(2) The appeals and advisory board shall review building-related and fire codes issues when requested to do so by the *Building Official* or fire chief and shall provide a recommendation to the *Building Official* or fire chief.

(3) The appeals and advisory board may also review and make recommendations to the *Building Official* or fire chief on any building-related or fire code issue, as requested by a citizen or board member when the request for board review is approved by both the *Building Official* and appeals and advisory board chairman.

(4) Appeals, as defined in subsection 10-14(a), do not require approval by either the *Building Official* or chairman of the appeals and advisory board in order to be heard.

(5) All meetings of the board must comply with the provisions of the Texas Open Meetings Act. Through board action, technical issue items may be added for discussion to any future board meeting agenda. Administrative and non-technical agenda items may only be added to the agenda and discussed when approved by the *Building Official.*

(6) Technical committees shall be established by the board to assist the *Building Official* and fire chief in determining recommendations for the adoption of the model codes listed in subsections 10-2(1)— (6) of this chapter and the model code listed in Chapter 11 and any associated local amendments to these codes.

(7) The responsibilities of the appeals and advisory board shall be limited to those specifically contained in this chapter.

(d) Qualifications. The board of appeals shall consist of seventeen (17) members and seventeen (17) alternates who are qualified by experience and training to act on matters pertaining to building-related and fire codes and may not be employees of the city. Board of appeals members and alternate members shall reside in the city unless the residence requirement is waived by city council. New applicant and non-holdover existing member nominations to the Board shall be made in writing to the secretary of the board of appeals by industry associations that are affiliated with nationally recognized organizations and include language nominating an individual for any membership within a given category. Industry associations may still request a preference for primary or secondary membership in its nomination letter. City Council shall appoint board members accommodating this preference with an overall priority given existing board vacancies. Upon City Council appointment, the board is (1) authorized to administratively switch primary and alternate membership designations within the same category; and also (2) to fill vacant primary member positions with alternate members within the same category. Exercise of board authority shall only be done where necessary for efficient administration of board function, with the approval of the individual impacted member, and with a majority vote of the board in favor of the action. Any action taken by the board under this section shall have no impact on the time a member shall serve on this board. Membership of the appeals and advisory board, including alternates, is by category and as follows:

(1) One member and one alternate shall be a structural engineer licensed or registered by the state as a professional engineer.

(2) One member and one alternate shall be a fire protection engineer licensed or registered by the state as a professional engineer.

(3) One member and one alternate shall be an electrical engineer licensed or registered by the state as a professional engineer.

(4) One member and one alternate shall be a plumbing engineer, or a mechanical engineer licensed or registered by the state as a professional engineer.

(5) One member and one alternate shall be an architect licensed by the state.

(6) Two (2) members and two (2) alternates shall be building contractors registered by the city.

(7) Two (2) members and two (2) alternates shall be licensed by the state as a master electrician. Of these, one member and one alternate represent organized labor, and one member and one alternate represent open shop.

(8) Two (2) members and two (2) alternates shall be licensed by the state as an air conditioning and refrigeration contractor. Of these, one member and one alternate shall represent organized labor and one member, and one alternate shall represent open shop.

(9) Two (2) members and two (2) alternates shall be licensed by the state as a master plumber. Of these, one member and one alternate represent organized labor and one member, and one alternate represent open shop.

(10) One member and one alternate shall be a commercial building contractor.

(11) One member and one alternate shall be a commercial building owner, manager, or their representative.

(12) One member and one alternate shall be a Residential Group R-2 multi-family building owner, manager, or their representative.

(13) One member and one alternate: licensed by either the city or the state as a master sign electrician.

The fire chief or designee shall be an ex-officio member. The *Building Official* or designee shall also be an ex-officio member and shall act as secretary to the appeals and advisory board. The *Building Official* or fire chief or their respective designees shall not have a vote on any matter before the appeals and advisory board.

The appeals and advisory board shall be subject to Chapter 2, Article IX entitled "Boards and Commissions," to the extent not in conflict with these provisions. Members shall be limited to three (3) consecutive two-year terms. Board membership shall continue in a holdover capacity until a replacement is appointed. The appeals and advisory board shall elect a chairman and vice-chairman annually, shall adopt rules of procedure for conducting its business and shall render all decisions and findings in writing to the appellant with copies to the *Building Official* or fire chief. All vacancies are filled for the unexpired portion of the term only.

(e) Quorum and majority vote.

(1) An appointed alternate member shall not serve on the appeals and advisory board, or any board committee, when the appointed member for whom they are an alternate is present.

(2) Nine (9) appointed members or their appointed member alternates, constitutes a quorum of the appeals and advisory board.

(3) Voting shall only be conducted by appointed members or their appointed alternates, should the member not be present. No proxy votes shall be allowed.

(4) A majority vote of those members present, including alternate members representing absent members, shall be necessary for approval of any decision of the appeals and advisory board, and each member or alternate member, should the member be absent, shall have one vote including the chairman.

(5) The appeals and advisory board shall take no action on an appeal unless one appointed member that is a subject matter expert is present for each major part of the appeal. For example: if an appeal has two (2) major parts, structural and plumbing, the structural engineer member and at least one of the two (2) master plumber members must be present in order for the appeals and advisory board to take action on the appeal. Failure of the appeals and advisory board to have these subject matter experts present does not result in the approval of the applicant's appeal.

(f) Committees. The appeals and advisory board may form committees to advise it on specific matters. Prior to conducting public hearings on any of the nationally recognized building-related codes and any associated amendments thereto, the appeals and advisory board shall form code review committees and shall select a chairman for such committee. The purpose of code review committees is to review the newly published codes and to receive public comments on these codes and their associated amendments. The *Building Official* will provide appropriate staff support to all such committees. The chairman of each code review committee shall report his committee recommendations to the appeals and advisory board during the subsequent public hearings conducted by the board on these codes.

(1) **Committee membership.** Committee membership shall consist of appointed members or their appointed alternates, should the member not be present, and may also consist of not more than four (4) individuals who are not appointed by the mayor and city council and who are not required to reside in the city. A committee is required to have at least four (4) appointed members or their appointed alternates. Both the primary board member and alternate board member for any category may serve on a committee, but only one category member, primary or alternate, may serve as a voting member on the committee. Committees shall have not more than seven (7) primary and alternate board members. Any board member may sit on a committee as an ex-officio member but shall not be counted as part of the quorum or be authorized to vote.

(2) **Committee quorum and voting.** A majority of the appointed members or their appointed alternates, should the member not be present, of the committee shall constitute a quorum. Only committee members who are appeals and advisory board members or their alternates, should the member not be present, shall be allowed to vote on committee items. Committee members not appointed by the mayor and city council to the appeals and advisory board, as either a member or alternate member, may not vote on committee matters, and shall not be counted in the quorum. A majority of committee members authorized to vote shall be required.

(g) Procedure. The meeting of the board of appeals shall be conducted in conformity with parliamentary rules (Robert's Rules of Order), or other rules established by the appeals and advisory board, unless otherwise specified in Chapters 10, Chapter 11, and specific articles in Chapter 28. The procedures shall not require compliance with strict rules of evidence but, shall mandate that only relevant information be received.

(h) Open hearing and meeting. All hearings and meetings of the appeals and advisory board shall be open to the public, and subject to the Texas Public Meetings Act. The appellant, the appellant's representative, the *Building Official*, fire chief and any other person whose interests are affected shall be given equal opportunity to be heard.

(i) Appeals and advisory board decision on appeals. A concurring vote of the majority of appointed members present once a quorum is established is required in order for the appeals and advisory board to modify or reverse the decision of the *Building Official* or fire chief.

(1) **Resolution.** The decision of the appeals and advisory board shall be by resolution. Certified copies, signed by the chairman of the appeals and advisory board, shall be furnished to the appellant and to the *Building Official* and fire chief.

(2) **Administration.** The *Building Official* and fire chief shall take immediate action in accordance with the decision of the appeals and advisory board.

(j) Board of appeals action. Any action taken by the building-related and fire codes board of appeals is final.

Sec. 10-15. Violations.

(a) Unlawful acts. It shall be unlawful for any person, firm, or corporation to erect, construct, alter, extend, repair, move, remove, demolish, or occupy any building, structure or equipment regulated by this chapter, or cause same to be done, in conflict with or in violation of any of the provisions of this chapter.

(b) Notice of violation. The *Building Official* is authorized to serve a notice of violation or order on the person responsible for the erection, construction, alteration, extension, repair, moving, removal, demolition or occupancy of a building or structure in violation of the provisions of this chapter, or in violation of a permit or certificate issued under the provisions of this chapter. Such order shall direct the discontinuance of the illegal action or condition and the abatement of the violation.

(c) Prosecution of violation. If the notice of violation is not complied with promptly, the *Building Official* is authorized to request legal counsel of the city to institute the appropriate proceeding at law or in equity to restrain, correct or abate such violation, or to require the removal or termination of the

unlawful occupancy of the building or structure in violation of such provisions of this chapter or of the order or direction made pursuant thereto.

(d) Violation penalties. Any person who violates a provision of this Code or fails to comply with any of the requirements thereof or who erects, constructs, alters, or repairs a building or structure in violation of the approved construction documents or directive of the *Building Official*, or of a permit or certificate issued under the provisions of this chapter, shall be subject to penalties prescribed by law.

(e) Misdemeanor. Any person violating any of the provisions of this Code or other ordinances which are enforced by the *Building Official* shall be deemed guilty of a misdemeanor. Each such person shall be deemed guilty of a separate offense for each day or portion thereof during which any violation of any of the provisions of this Code is committed, continued, or permitted. Each violation may be punishable by a fine not to exceed five hundred dollars ($500.00).

Sec. 10-16. Stop work order.

(a) Authority. Whenever the *Building Official* finds any work regulated by this chapter being performed in a manner either contrary to the provisions of this chapter or dangerous or unsafe, the *Building Official* is authorized to issue a stop work order.

(b) Issuance. The stop work order shall be in writing and shall be given to the owner of the property involved, or to the owner's agent, or to the person doing the work. Upon issuance of a stop work order, the cited work shall immediately cease. The stop work order shall state the reason for the order, and the conditions under which the cited work will be permitted to resume.

(c) Emergencies. Where an emergency exists, the building official shall not be required to give written notice prior to stopping work.

(d) Unlawful continuance. Any person who shall continue any work having been served with a stop work order, except such work as that person is directed to perform to remove the violation or unsafe condition, shall be subject to penalties as prescribed by law.

Sec. 10-17. Unsafe structures and equipment.

(a) Unsafe conditions. Structures or existing equipment that are or hereafter become unsafe, insanitary, or deficient because of inadequate means of egress facilities, inadequate light, and ventilation, or which constitute a fire hazard, or are otherwise dangerous to human life or the public welfare, or that involve illegal or improper occupancy or inadequate maintenance, shall be deemed an unsafe condition. Unsafe structures shall be taken down and removed or made safe, as the *Building Official* deems necessary and as provided for in this section. A vacant structure that is not secured against unauthorized entry shall be deemed unsafe.

(b) Record. The *Building Official* shall cause a report to be filed on an unsafe condition. The report shall state the occupancy of the structure and the nature of the unsafe condition.

(c) Notice. If an unsafe condition is found, the *Building Official* shall serve on the owner, agent, or person in control of the structure, a written notice that describes the condition deemed unsafe and specifies the required repairs or improvements to be made to abate the unsafe condition, or that requires the unsafe structure to be demolished within a stipulated time. Such notice shall require the person thus notified to declare immediately to the *Building Official* acceptance or rejection of the terms of the order.

(d) Method of service. Such notice shall be deemed properly served if a copy thereof is (a) delivered to the owner personally; (b) sent by certified or registered mail addressed to the owner at the last known address as referenced in the deed records with the return receipt requested; or (c) delivered in any other manner as prescribed by local law. If the certified or registered letter is returned showing the letter was not delivered, a copy thereof shall be posted in a conspicuous place in or about the structure

affected by such notice. Service of such notice in the foregoing manner upon the owner's agent or upon the person responsible for the structure shall constitute service of notice upon the owner.

(e) Restoration or abatement. Where the structure or equipment determined to be unsafe by the *Building Official* is permitted to be restored to a safe condition, the owner, the owner's authorized agent, operator or occupant of a structure, premises or equipment deemed unsafe by the *Building Official* shall abate or cause to be abated or corrected such unsafe conditions either by repair, rehabilitation, demolition, or other approved corrective action. To the extent that repairs, alterations, or additions are made, or a change of occupancy occurs during the restoration of the structure, such repairs, alterations, additions or change of occupancy shall comply with subsection 10-2(c) of this chapter.

Secs. 10-18—10-24. Reserved.

ARTICLE II. - DEFINITIONS

Sec. 10-25. Non-referenced definitions.

The following definitions are in addition to or supersede those listed in the referenced model codes of this chapter:

AHJ. Authority having jurisdiction.

AIR CONDITIONING AND REFRIGERATION CONTRACTING. Performing or offering to perform the design, installation, construction, repair, maintenance, service, or modification of equipment or a product in an environmental air conditioning system, a commercial refrigeration system, or a process cooling or heating system for the general public.

AIR CONDITIONING AND REFRIGERATION MAINTENANCE WORK. All work, including repair work, required for the continued normal performance of an existing environmental air conditioning system, a process cooling or heating system, a commercial refrigeration system, or commercial refrigeration equipment. The term does not include:

- The total replacement of a system; or
- The installation or repair of a boiler or pressure vessel that must be installed in accordance with rules adopted by the commission under V.T.C.A., Health and Safety Code ch. 755.

APPROVED. Approved by the *Building Official* or other authority having jurisdiction.

APPROVED AGENCY. An established and recognized agency regularly engaged in conducting tests or furnishing inspection services when such agency has been approved by the *Building Official.*

AWG. American Wire Gauge.

BILLBOARD OPERATOR. An individual licensed by the city as a billboard operator who engages in the business of erecting, painting, servicing, or maintaining billboards or any other off-premises advertising in accordance with this chapter and chapter 28 of this Code.

BOARD OF APPEALS. The building-related and fire codes appeals and advisory board of the city.

BUILDING OFFICIAL. The director of the development services department or a duly authorized representative who may act on his behalf charged with the administration and enforcement of this chapter. For the purpose of this chapter, the *Building Official* shall also be known as the code official and AHJ.

BUILDING OWNER/MANAGER. A person or company that is in the business of managing properties and is responsible for the upkeep and maintenance of such properties.

CERTIFICATE OF OCCUPANCY OR C OF O. A document issued by the *Building Official* after he inspects the building or structure and finds no violations of the provisions of this chapter or other laws that are enforced by the department.

CHAPTER. Chapter 10 of the City Code of San Antonio, Texas, also known as the building-related codes of the city, and any subsequent enactments, amendments and/or reenactment of chapter 10 of the City Code.

CITY. The City of San Antonio, Texas.

COMMERCIAL SIGN OPERATOR. An individual licensed by the city as a commercial sign operator who engages in the business of erecting, painting, servicing, or maintaining commercial signs in accordance with this chapter and chapter 28 of the City Code.

CPS ENERGY. City Public Service Energy.

DECK. An outdoor platform extending horizontally from the rear or side yard of the structure, attached to a building or self-supported.

DEMOLITION. Has the meanings assigned in appendix A of chapter 35 of the City Code.

DEMOLITION CONTRACTOR. An individual or company or partnership doing the work of demolition for payment.

DEPARTMENT. Development services department of the city.

DISTRIBUTED GENERATION (DG). Includes, but is not limited to, electrical power derived from wind, water, sunlight, mechanical equipment, batteries, or fuel cells. DG includes all sources of electrical energy that are derived from equipment and/or systems other than the CPS Energy system that may include, wholly or in part, generation, transmission, and distribution of electrical energy.

1. All DG systems that are interactive with the electrical grid of CPS Energy shall be approved by the city and CPS Energy prior to the issuance of an electrical permit.
2. Stand-alone DG systems that are not connected to the electrical grid of CPS Energy require electrical permits when any portion, segment or component of the DG system operates at or is rated for operation above 50-volts (AC or DC) or above one thousand two hundred (1,200) watts.
3. Interactive DG systems shall be installed per CPS Energy regulations.
4. All DG systems shall meet the requirements of the US Environmental Protection Agency (EPA).
5. All DG systems shall meet the requirements of TCEQ.

DRAIN CLEANER. An individual who has completed at least four thousand (4,000) hours working under the supervision of a responsible master plumber as a drain cleaner-restricted registrant, who has fulfilled the requirements of and is registered with the state plumbing licensing board, and who installs cleanouts and removes and resets p-traps to eliminate obstructions in building drains and sewers under the supervision of a responsible master plumber.

DRAIN CLEANER—RESTRICTED REGISTRANT. An individual who has worked as a plumber's apprentice under the supervision of a responsible master plumber, who has fulfilled the requirements of and is registered with the state plumbing licensing board, and who clears obstructions in sewer and drain lines through any code-approved existing opening under the supervision of a responsible master plumber.

DWV. Drain, waste, and vent.

ELECTRICAL APPRENTICE. An individual, licensed by the State as an apprentice who works under the on-site direct supervision of a master electrician, a journeyman electrician, or a residential wireman, on behalf of an electrical contractor, or employing governmental entity who performs "electrical work" as defined in this chapter.

ELECTRICAL CONTRACTING. The business of designing, installing, erecting, repairing, or altering electrical wires or conductors to be used for light, heat, power, or signaling purposes. The term includes the installation or repair of ducts, raceways, or conduits for the reception or protection of wires or conductors and the installation or repair of any electrical machinery, apparatus, or system used for electrical light, heat, power, or signaling.

ELECTRICAL CONTRACTOR. A person or entity engaged in electrical contracting.

ELECTRICAL MAINTENANCE TECHNICIAN. An individual registered with the city as an electrical maintenance technician, on behalf of a building owner or management group who performs limited "electrical maintenance work" as defined in this chapter.

ELECTRICAL MAINTENANCE WORK. The replacement or repair of existing electrical appurtenances, apparatus, equipment, machinery, or controls used in connection with the use of electrical energy in, on, outside, or attached to a building, dwelling, structure, property, or premises.

ELECTRICAL SIGN APPRENTICE. An individual, licensed by the state as an electrical sign apprentice who works under the on-site direct supervision of a master electrician, master sign electrician, journeyman electrician, electrical sign journeyman electrician, or electrical sign technician, on behalf of an electrical sign contractor who performs "electrical sign work" as defined in this chapter.

ELECTRICAL SIGN CONTRACTING. The business of designing, manufacturing, installing, connecting, reconnecting, or servicing an electric sign, cold cathode, neon gas tubing, or outline gas tubing, or altering electric sign wiring or conductors either inside or outside of a building.

ELECTRICAL SIGN CONTRACTOR. A person or entity engaged in electrical sign contracting.

ELECTRICAL SIGN TECHNICIAN. An individual registered with the city as a sign technician who works under the general supervision of a master electrician or master sign electrician on behalf of an electrical sign contractor who performs "electrical sign work" as defined in this chapter.

ELECTRICAL SIGN WORK. All work and material used in manufacturing, installing, or contracting to install, erecting, hanging, connecting, reconnecting, servicing, or maintaining any electric or neon sign or electric neon tubing for any purpose, whether inside or outside of any building or structure or on any part of the public right-of-way subject to this chapter.

ELECTRICAL SYSTEM. All material, fixtures, devices, and appliances for the purpose of conducting or utilizing electrical energy.

ELECTRICAL TRADE. Installing, contracting to install, maintaining, repairing, connecting, reconnecting, or servicing of any wiring, fixtures, or equipment used for conducting of electricity for which a permit is required by this chapter.

ELECTRICAL WIRING. Any of the methods and materials described in the National Electrical Code as adopted by the city, except as may be amended by this chapter.

ELECTRICAL WORK. Labor or material used in installing, maintaining, modifying, or extending an electrical wiring system and the appurtenances, apparatus, or equipment used in connection with the use of electrical energy in, on, outside, or attached to a building, residence, structure, property, or premises. The term includes service entrance conductors as defined by the National Electrical Code as adopted by the city.

ELECTRO-MECHANICAL INTEGRITY. The condition of an electrical product, electrical system, or electrical equipment installed in accordance with its intended purpose and according to standards at least as strict as the standards provided by the National Electrical Code, the manufacturer's specifications, any listing or labeling on a product, and all other applicable codes or ordinances.

ELECTRIC UTILITY COMPANY. The electric utility company is CPS Energy, governed by the CPS Energy board of trustees, an appointed board.

FIRE CHIEF. The chief officer of the San Antonio Fire Department or a duly authorized representative.

FIRM. A business entity including, without limitation, a sole proprietorship, corporation, partnership, or any other entity that is legally recognized in Texas.

FOSTER CARE FAMILY HOME. A single independent residential occupancy that is the primary residence of the caregiver and licensed by the state to provide 24-hour care for six (6) or fewer children (including those related to the caregiver) up to the age of eighteen (18) years.

GENERAL CONTRACTOR. A person actively engaged in and is completely responsible for the construction of commercial or industrial structures within the geographical areas to which this chapter applies.

GOVERNMENT AGENCY. An executive, legislative, or judicial agency, department, board, commission, authority, institution, or instrumentality of the federal government, a state, county, municipality, or other political subdivision of the state.

GREASE TRAP INTERCEPTOR. A plumbing appurtenance installed in a sanitary drainage system to intercept nonpetroleum fats, oils, and greases (FOG) from a wastewater discharge and is identified by

retention time, baffle(s), a minimum of two (2) compartments, a minimum total volume of five hundred (500) gallons, and gravity separation. Gravity grease interceptors are generally installed outside. See definition of gravity grease interceptors in Section 10-82 of this chapter.

HOME IMPROVEMENT CONTRACTOR. A person or entity engaged in the business of making home improvements or who undertakes, offers to undertake, or agrees to perform any home improvement, whether or not such person is registered pursuant to this chapter. Home improvement means the repair, replacement, remodeling, alteration, conversion, or modernization to any existing building, or any portion of an existing building, not owned by a government agency, which is used or designed to be used as a private residence or dwelling place for not more than two (2) families, and shall include, but not by way of limitation, the construction, replacement or improvement of driveways, swimming pools, roofs, fences and other similar improvements. "Home improvement" shall not include:

1. The construction of a new private residence or dwelling place for not more than two (2) families, and the initial construction of improvements or additions to the same lot or lots provided the addition or improvement is commenced within one year from the date of completion of construction of the new residence or dwelling place; nor
2. The sale of goods or materials by a seller who neither arranges to perform nor performs directly or indirectly any work or labor in connection with the installation of or application of the goods or materials.

IBC. International Building Code, 2021 edition, as amended by the city.

IEBC. International Existing Building Code, 2021 edition, as amended by the city.

IECC. International Energy Conservation Code, 2021 edition, as amended by the city.

IFC. International Fire Code, 2021 edition, as amended by the city.

IFGC. International Fuel Gas Code, 2021 edition, as amended by the city.

IMC. International Mechanical Code, 2021 edition, as amended by the city.

IPC. International Plumbing Code, 2021 edition, as amended by the city.

IRC. International Residential Code, 2021 edition, as amended by the city.

IRRIGATION INSTALLATION. Fabrication of an irrigation system using components that include piping, fittings, valves, sprinkler heads and pumps; replacement, repair, alteration, or maintenance of a lawn sprinkler system component; or lawn sprinkler system site preparation including digging, trenching, vibratory flow operation, and final grading.

IRRIGATION CONTRACTOR. A person licensed under V.T.C.A., Water Code Chapter 37 and V.T.C.A., Occupations Code Chapter 1903.

IRRIGATION SYSTEM. An assembly of component parts permanently installed for the controlled distribution and conservation of water to irrigate landscape vegetation, reduce dust, or control erosion. The term does not include a system used on or by an agricultural operation as defined by V.T.C.A., Agriculture Code § 251.002.

ISPSC. International Swimming Pool and Spa Code, 2021 edition, as amended by the city.

JOURNEYMAN ELECTRICIAN. An individual, licensed by the state as a journeyman electrician, who works under the general supervision of a master electrician, on behalf of an electrical contractor or employing governmental entity who performs "electrical work" as defined in this chapter.

JOURNEYMAN PLUMBER. An individual, licensed by the state as a journeyman plumber who has met the qualifications for registration as a plumber's apprentice or for licensure as a tradesman plumber - limited licensee, who has completed at least eight thousand (8,000) hours working under the actual installation, alteration, repair, service, and renovating of plumbing, and who has successfully fulfilled the examinations and requirements of the State Plumbing Licensing Board.

JOURNEYMAN SIGN ELECTRICIAN. An individual, licensed by the state as a journeyman sign electrician, who works under the general supervision of a master electrician or a master sign electrician on behalf of an electrical sign contractor who performs "electrical sign work" as defined in this chapter.

LICENSED BACKFLOW ASSEMBLY TESTER. An individual licensed by TCEQ as a backflow assembly tester.

LP GAS INSTALLERS. A person is not required to be licensed under this chapter to perform LPG system installation if the person performs LPG system installation as an LP gas installer licensed under V.T.C.A., Natural Resource Code Chapter 113, Subchapter D.

MAINTENANCE ELECTRICIAN. An individual licensed as a maintenance electrician who works under the general supervision of a master electrician on behalf of an electrical contractor or employing government entity and who performs limited "electrical maintenance work" as defined in this chapter.

MASTER ELECTRICIAN. An individual licensed by the state as a master electrician who, on behalf of an electrical contractor, electrical sign contractor, or employing governmental entity, performs "electrical work" as defined by this chapter.

MASTER PLUMBER. An individual licensed in the state as a master plumber who is skilled in the design, planning, superintending, and the practical installation, repair, and service of plumbing; who is knowledgeable about the codes, ordinances, or rules and regulations governing those matters; who alone, or through an individual or individuals under his supervision, performs plumbing work; and who has successfully fulfilled the examinations and requirements of the State Plumbing License Board.

MASTER SIGN ELECTRICIAN. An individual licensed by the state as a master sign electrician who, on behalf of an electrical sign contractor, performs "electrical sign work" as defined in this chapter.

MECHANICAL MASTER. Any person licensed as a mechanical master in compliance with the pre-requisites of this chapter who holds himself out to the public as being qualified to do the kind of mechanical work or to contract for the doing of the kind of mechanical work by himself or by the employment of mechanical technicians or mechanical apprentices which his license authorizes him to do.

MECHANICAL TECHNICIAN. Any person licensed as a mechanical technician, in compliance with the requirements of this chapter, who works for and under the general supervision and direction of a mechanical master, who does mechanical work contracted for by mechanical master, and who does not hold himself out to the public as being qualified to contract for the doing of mechanical work.

MEDICAL GAS PIPING ENDORSEMENT. A document entitling the holder of a master or journeyman plumbing license to install piping used solely to transport gases used for medical purposes including but not limited to oxygen, nitrous oxide, medical air, nitrogen, and medical vacuum. Also, a document entitling the holder of a Plumbing Inspector License to inspect medical gas and vacuum system installations.

MULTIPURPOSE RESIDENTIAL FIRE PROTECTION SPRINKLER SPECIALIST ENDORSEMENT. A document entitling the holder of a Master or Journeyman Plumber License to install a multipurpose residential fire protection sprinkler system in a one- or two-family dwelling. Also, a document entitling the holder of a Plumbing Inspector License to inspect a multipurpose residential fire protection sprinkler system.

MORAL TURPITUDE. Conduct that is contrary to justice, honesty, or good morals.

NEC. National Electrical Code, NFPA 70, 2020 edition, as amended by Article VI of this chapter.

NFPA 70. National Electrical Code, NFPA 70, 2020 edition, as amended by Article VI of this chapter.

OCCUPANCY. The purpose for which a building, or part thereof, is utilized or occupied.

OCCUPANT. Any person, agent, firm, or corporation that occupies a building or part thereof as an owner or a tenant.

ON-SITE. This definition pertains to the definitions of "electrical apprentice" and "electrical sign apprentice" in this article. When referencing one- and two-family dwellings, it means residential lots that abut each other. When referencing multi-family dwellings, commercial and industrial structures, or facilities, it means within the structure or on the premises.

OPEN WIRING. The types of interior wiring described in the NEC, Articles 334, 338 and 340.

OWNER. Has the meaning provided in Chapter 1, Section 1-2, Rules of construction of the City Code and also includes any homeowner, property owner, person authorized to procure services of a contractor, or any other person who orders, contracts for, or purchases the residential building construction services of a contractor, or the person entitled to the performance of the work of a contractor.

PATIO (UNCOVERED). An outdoor space for dining or recreation that adjoins a residence and includes a hard walking surface.

PIPE WELDER. A person who specializes in the welding of pipes and holds a valid certificate of competency from a recognized testing laboratory based on the requirements of the ASME Boiler and Pressure Vessels Code, Section IX.

PLUMBER'S APPRENTICE. An individual other than a master plumber, journeyman plumber, or tradesman plumber-limited licensee who, as the person's principal occupation, is engaged in learning and assisting in the installation of plumbing, is registered by the State Plumbing Licensing Board, and works under the general supervision of a licensed responsible master plumber and the direct supervision of a licensed plumber.

PLUMBING WORK. Any labor or material used in installing, maintaining, or modifying a plumbing system and the appurtenances, apparatus, or equipment used in connection with the use of plumbing in, on, outside, or attached to a building, residence, structure, property, or premises.

PORCH. An outdoor space for dining or recreation that adjoins a residence and includes a hard walking surface with a solid roof to provide protection against the elements.

PORTE COCHERE. A roofed structure that is open on at least three (3) sides and extends from the building entrance over an adjacent driveway and shelters vehicle ingress and egress.

RECLAIMED WATER. Water from sources such as rainwater harvesting, A/C condensate collection, carwashes, ponds, lakes, rivers, or other sources as approved by the *Building Official.*

RECYCLED WATER. Water that, as a result of a tertiary treatment of domestic wastewater by a public agency, is suitable for a direct beneficial use or a controlled use that would not otherwise occur. The level of treatment and quality of the reclaimed/recycled water shall be approved by TCEQ.

RESIDENTIAL UTILITIES INSTALLER (PLUMBING). An individual who has completed at least two thousand (2,000) hours working under the supervision of a responsible master plumber and a registered plumber's apprentice, who has fulfilled the requirements of and is registered by the State Plumbing License Board, and who constructs and installs yard water service piping for one- and two-family dwellings and building sewers.

RESIDENTIAL APPLIANCE. A unit of electrical equipment designed and installed in a dwelling by direct connection to an existing electrical circuit to perform a specific function.

RESIDENTIAL APPLIANCE INSTALLER. A person, other than a licensed electrician, who is licensed to perform electrical appliance installation.

RESIDENTIAL APPLIANCE INSTALLATION CONTRACTOR. A business entity, other than an electrical contractor or electrical sign contractor, engaged in residential appliance installation contracting.

RESIDENTIAL BUILDING CONTRACTOR. A person, company, association, agency, or other entity registered with the city to engage in the business of constructing, structurally altering or enlarging any

one- or two-family detached dwelling or townhouse including detached accessory buildings in excess of three hundred (300) square feet in area thereto as regulated by the *International Residential Code.*

REGISTERED CONTRACTOR. A residential building contractor, as defined in this chapter, registered with the city to do residential building contracting.

RESIDENTIAL WIREMAN. An individual, licensed by the state as a residential wireman, who may only perform electrical installations in ~~new~~ single-family and multifamily dwellings not exceeding ~~three~~ four (~~3~~4) stories and who works under the general supervision of a master electrician, on behalf of an electrical contractor or employing governmental entity who performs "electrical work" as defined in this chapter.

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 (https://www.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* (2021).

The 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, existing building, or swimming pool code shall be construed to be a reference to the respective building, electrical, fuel gas, mechanical, plumbing, energy conservation, 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* (2021).

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

Chapter 2, DEFINITIONS, is amended for ADOBE CONSTRUCTION, AMBULATORY CARE FACILITY, FIRE AREA 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.

[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 ft^2 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 ft^2 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 907.2.9.3 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 childcare 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 503.1.4, Occupied roofs, is amended to read as follows with all other text to remain as is:

503.1.4 Occupied roofs. A roof level or portion thereof shall be permitted to be used as an occupied roof provided the occupancy of the roof is an occupancy that is permitted by Table 504.4 for the story immediately below the roof. The area of the occupied roofs shall be included in the building area as regulated by Section 506. An occupied roof shall not be included in the building height or number of stories as regulated by Section 504, provided that the penthouses and other enclosed rooftop structures comply with Section 1511. Rooftop canopies complying with Section 3105 and enclosed rooftop structures shall not exceed 1/3 of the occupied rooftop area. Enclosed rooftop structures shall not contain habitable spaces.

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 (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 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 official's review and approval, the official 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 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 is less than 12,000 ft^2 in area.
3. The detached open pavilion is 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 has 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 m^2).
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 daycare 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 firefighting 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 of the International Fire Code.

   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 an NFPA 13R system with elevator systems, the elevator machine room shall be sprinklered per NFPA 13.

SECTION 903, AUTOMATIC SPRINKLER SYSTEMS, is amended by amending [F] 903.4, Sprinkler system supervision and alarms, to add Exception 9, 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 waterflow switches on all sprinkler systems shall be electrically supervised by a *listed* fire alarm control unit.

***Exceptions*:**

9. 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 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. Permitee is responsible for the total installation. Permitee 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.

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 and tap values for speakers when installed.
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 shall be completed in accordance with NFPA 72, Section 10.5.6.3.1 and 10.5.6.3.2
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, 2019 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 in responsible charge or licensed planner, and a manufacturer's equipment data sheet for the new fire alarm control unit shall be provided in the submittal package. If a floor plan that reflects the configuration of the existing system is available, it shall be permitted to be submitted in lieu of the detailed riser diagram.

[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 7.2.1
2. A copy of the Record of Completion as required by NFPA 72, Section 7.2.1
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 [F] 907.2.13.1.2, Duct smoke detection, is amended to read as follows:

[F] 907.2.13.1.2 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 m^3/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 m^3/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 A17.1-2019, 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 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. The presignal or Positive Alarm Sequence shall be annunciated at an approved, *constantly attended location*, having the capability to activate the occupant notification 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] 907.5.2.1.4, Testing of audible alarms in occupancies other than Group R, and Section [F] 907.5.2.1.5, Testing of audible alarms in Group R occupancies, as follows:

[F] 907.5.2.1.4 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 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] 907.5.2.1.5 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 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. Levels shall be taken in the most remote area of the dwelling or sleeping unit first, including bathrooms and balconies.

5. Initial readings to confirm the ambient sound level in each area shall be taken.

6. The fire alarm system shall be activated and readings 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.

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 Chapter 11 of the City Code, Section 11-40, 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 Chapter 11 of the City Code, Section 11-40, 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

Table 912.7

FDC Connections required by System Type

Sprinkler Systems Wet Dry	Either a 5 Inch Storz inlet or (2) 2 ½ Inch inlets		
Standpipes: Automatic Wet Automatic Dry Semiautomatic Dry		Either a 5 Inch Storz inlet or (2) 2 ½ Inch inlets	
Standpipes: Manual Wet Manual Dry			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
Standpipes: All Highrise			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: 1. High-rise buildings 2. Buildings or multiple attached buildings exceeding 900 ft (274.3 m) perimeter distance

			Per 2019 NFPA 14 7.12.2.2

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

[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 1207, ENHANCED CLASSROOM ACOUSTICS, is deleted in its entirety.

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. ~~[110.]~~

***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 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 m^2).

***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'_e. [~~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 finishes applied to [~~adobe masonry~~] earthen walls shall be of any type permitted by this section or Chapter 14, except were stated otherwise in this section.

2109.2.4.8.1 Where required. Unstabilized [~~adobe masonry~~] earthen walls shall receive a weather protective exterior finish in accordance with Section 2109.2.4.8.

2109.2.4.8.2 Vapor permeance. Plaster and finish assemblies shall have a vapor permeance of not less than 5 perms.

***Exception*:** Insulation products applied to the exterior of stabilized [~~adobe masonry~~] earthen walls in Climate Zones 2B, 3B, 4B and 5B shall not have a vapor permeance requirement.

2109.2.4.8.3 Plaster thickness and coats. Plaster applied to [~~adobe masonry~~] earthen walls shall be not less than 7/8 inch (22 mm) and not greater than 2 inches (51 mm) thick. Plaster shall be applied in not less than two coats.

2109.2.4.8.4 Plaster application. Where plaster is applied directly to [~~adobe masonry~~] earthen walls, no intermediate membrane shall be used.

2109.2.4.8.5 Lath for plaster. Lath shall be provided for all plasters, except where not required elsewhere in Section 2109.2.4.8. Where lathing is used as the method of plaster attachment, lathing shall be of galvanized stucco netting with galvanized [~~F~~]fasteners that shall be corrosion resistant and spaced at a maximum of 16 inches (406 mm) on center with a minimum 1 ½-inch (38 mm) penetration into the [~~adobe~~] earthen wall. [~~Metal lath shall comply with ASTM C1063, as modified by this section, and shall be corrosion resistant. Plastic lath shall comply with ASTM C1788, as modified by this section.~~] Wood substrates shall be protected with No. 15 asphalt felt, an approved wood preservative or other protective coating prior to lath application.

2109.2.4.8.9.5 Conditions where lathing is not required. For unstabilized [~~adobe~~] earthen walls finished with unstabilized clay plaster, lathing shall not be required.

Section 2092.1.1, Fixture calculations, Exception 2 is amended as follows, all other code text remains as is:

Exceptions:

2. Where multiple-user facilities are designed to serve all genders, the minimum fixture count shall be calculated 100 percent, based on total occupant load. In such multiple-user facilities, each fixture type shall be in accordance with ICC A117.1 and each urinal that is provided shall be [~~located in a stall~~] provided with walls and a door enclosing the fixture.

Section 2902.2, Separate facilities, Exception 6 is amended as follows, all other code text remains as is:

Exceptions:

6. Separate facilities shall not be required where rooms having both water closets and lavatory fixtures are designed for use by both sexes and privacy for water closets [~~in accordance with Section 405.3.4 of the International Plumbing Code. Urinals shall be located in an area visually separated from the remainder of the facility or each urinal that is provided shall be located in a stall~~] with walls and a door enclosing the fixtures.

Section 3114, PUBLIC USE RESTROOM BUILDINGS IN FLOOD HAZARD AREAS, is repealed in its entirety.

Section 3115.3, Intermodal shipping containers, is repealed in its entirety.

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/m^2) 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/m^2) 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 1~~], 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 Plus 11% of the Building Plan Review Fee	$27.50
Commercial Irrigation Plan Review	$100.00
Commercial Swimming Pool Plan Review Fee	(based upon valuation)
Pool Commercial Landscape Plan Review	
Base fee Plus 11% of the Building Plan Review Fee	$27.50
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/ Variance Request	$350.00
Commercial Project Modification Request Fee per Modification Request	$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 Walk-Through Fee for Plans over 500 Square Feet (per plan)	$100.00
Inspection for which no fee is specifically indicated (per hour with 1 hour minimum)	$100.00
Inspection Schedule Fee (Free on-line)	$3.00
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 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	$51.50
Miscellaneous Building Development Fees	
Permit Processing Fee	$10.00
Building Permit ready/status letter	$50.00
Link child-parent permits, 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
Occupant load adjustment fee per hour	100.00
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.)	

Sec. 10-32. New commercial fee schedule.

Sec. 10-33—10-35. Reserved.

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

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

The 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, existing building, or swimming pool code shall be construed to be a reference to the respective building, electrical, fuel gas, mechanical, plumbing, energy conservation, existing building, or swimming pool code specifically adopted by reference in Articles II through XIV of this chapter.

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

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

TABLE R301.2 is amended to read as follows:

TABLE R301.2
CLIMATIC AND GEOGRAPHIC DESIGN CRITERIA

GROUND SNOW LOAD[o]	WIND DESIGN		SEISMIC DESIGN CATEGORY[f]	SUBJECT TO DAMAGE FROM		
	Speed[d] (mph)	Topographic effects[k]		Weathering[a]	Frostline depth[b]	Termite[c]
5	108	NO	A	Negligible	0	Moderate To Heavy

WINTER DESIGN TEMP[e]	ICE BARRIER UNDERLAYMENT REQUIRED[h]	FLOOD HAZARDS[g]	AIR FREEZING INDEX[i]	MEAN ANNUAL TEMP[j]

30°	NO	Appendix F, UDC	16	68.7°

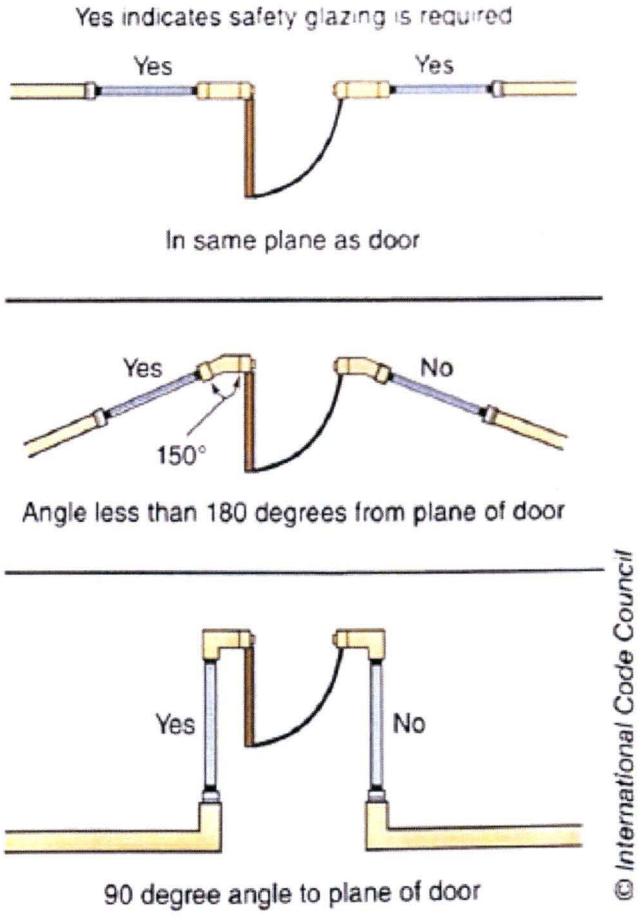
Section R308.4.2, Glazing adjacent to doors, is amended to read as follows:

R308.4.2 Glazing adjacent to doors. Glazing in an individual fixed or operable panel adjacent to a door shall be considered to be a hazardous location where the bottom exposed edge of the glazing is less than 60 inches (1524 mm) above the floor or walking surface and it meets either of the following conditions:

1. Where the glazing is within 24 inches (610 mm) of either side of the door in the plane of the door in a closed position.
2. Where the glazing is on a wall less than 180 degrees (3.14 rad) from the plane of the door in a closed position within 24 inches (610 mm) of the hinge side of an in-swinging door.

***Exceptions*:**

1. Decorative glazing.
2. Where there is an intervening wall or other permanent barrier between the door and the glazing.
3. Where access through the door is to a closet or storage area. [~~3 feet (914 mm) or less in depth. Glazing in this application shall comply with section R308.4.3.~~]
4. Glazing that is adjacent to the fixed panel of patio doors.



Glazing Adjacent to Doors

Section R310.1, Emergency escape and rescue opening required, is amended to read as follows with exceptions to remain as written:

> **R310.1 Emergency escape and rescue opening required.** Basements, habitable attics, and every sleeping room shall have not less than one operable emergency escape and rescue opening. Where basements contain one or more sleeping rooms, an emergency escape and rescue opening shall be required in each sleeping room. [~~Emergency escape and rescue openings shall open directly into a public way, or to a yard or court having a minimum width of 36 inches (914 mm) that opens to a public way.~~]

Section R311.7, Stairways, is amended as follows:

> **R311.7 Stairways.** Where required by this code or provided, stairways shall comply with this section.
>
> ***Exceptions***:
>
> 1. Stairways not within or <u>not</u> serving a building, porch or deck.
> 2. Stairways leading to nonhabitable attics.
> 3. Stairways leading to crawl spaces.

Section R311.8, Ramps, is amended as follows:

R311.8 Ramps. Where required by this code or provided, ramps shall comply with this section.

Exception: Ramps not within or not serving a building, porch, or deck.

Section R313.2, One- and two-family dwellings automatic fire sprinkler systems, and Section R313.2.1, Design and installation, are deleted and replaced with the following:

R313.2 One- and two-family dwellings automatic fire sprinkler systems. Where automatic residential fire sprinkler systems are installed, they shall be designed and installed in accordance with Section P2904 or NFPA 13D.

[~~R313.2 One and two-family dwellings automatic fire systems. An automatic residential fire sprinkler system shall be installed in one-and two-family dwellings.~~

~~Exception: An automatic residential fire sprinkler system shall not be required for additions or alterations to existing buildings that are not already provided with a sprinkler system.~~

~~R313.2.1 Design and installation. Automatic residential fire sprinkler systems shall be designed and installed in accordance with Section P2904 or NFPA 13D.]~~

Section R315.2.2, Alterations, repairs, and additions, is amended to read as follows:

R315.2.2 Alterations, repairs and additions. Where *alterations*, *repairs* or *additions* requiring a building permit occur [,] inside of existing dwellings that have attached garages or inside of existing dwellings within which fuel-fired appliances exist, or where one or more sleeping rooms are added or created in existing dwellings, the individual *dwelling unit* shall be equipped with carbon monoxide alarms located as required for new *dwellings*.

***Exceptions*:**

1. Work involving the exterior surfaces of *dwellings*, such as the replacement of roofing or siding, or the addition or replacement of windows or doors, or the addition of a porch or deck.
2. Installation, alteration, or repairs of plumbing or mechanical systems.
3. Installation, alteration or repairs of mechanical systems that are not fuel fired.

Section R317.1.2, Ground contact is amended to read as follows:

R317.1.2 Ground contact. All wood in contact with the ground, embedded in concrete in direct contact with the ground or embedded in concrete exposed to the weather that supports permanent structures intended for human occupancy shall be *approved* pressure-preservative-treated wood suitable for ground contact use, except that untreated wood used entirely below groundwater level or continuously submerged in fresh water shall not be required to be pressure-preservative treated. Creosote-treated railroad ties will not be approved for use in retaining wall construction unless the wall is exempt from the requirement for a permit under Section 10-6(e)(1)(d) of this chapter and the wall is located greater than 4 feet (1.22 m) from the public right-of-way.

SECTION R322, FLOOD-RESISTANT CONSTRUCTION, is hereby repealed and replaced with the City's flood plain ordinance found in Appendix F, Floodplain Areas of Special Flood Hazard, of the Unified Development Code (UDC).

Section R403.1.6, Foundation anchorage, is amended in the first paragraph only to read as follows:

R403.1.6 Foundation anchorage. Wood sill plates and wood walls that are part of the braced wall provisions of this code and supported directly on continuous foundations shall be anchored to the foundation in accordance with this section.

Section R408, UNDER-FLOOR SPACE, is amended by adding Section R408.9, Foundation Repair, to read as follows:

R408.9 Foundation Repair. A foundation repair permit and assumption of Engineer of Record letter and any construction documents must be submitted at time of application. The engineer shall inspect foundation repairs and submit a letter for the repairs. Any skirting removed, repaired, or replaced along with ventilation, sub-floor access and drainage will require a final inspection by the building official or an engineer's letter for those repairs.

Section R903.4, Roof drainage, is amended by adding Sections R903.4.2, Zero lot line development, and R903.4.3, Gutters and downspouts, to read as follows:

R903.4.2 Zero lot line development. On zero lot line development where roof projections are allowed by deed covenant or ingress/egress easements, 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).

R903.4.3 Gutters and downspouts. 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 M1305.1.2, Appliances in attics, is amended by adding Section M1305.1.2.2, Access for cooling or heating appliance, to read as follows:

M1305.1.2.2 Access for cooling or heating appliance. For one- and two-family residential occupancies and townhomes with newly installed cooling or heating appliances in the attic space, a permanent ladder, fold-away ladder, or a direct access door opening from the house on the same floor level shall be installed.

Section M1411.3.2, Drain pipe materials and sizes, is amended as follows:

M1411.3.2 Drain pipe materials and sizes. Components of the condensate disposal system shall be ABS, cast iron, copper, cross-linked polyethylene, CPVC, galvanized steel, PE-RT, polyethylene, polypropylene or PVC pipe or tubing. Components shall be selected for the pressure and temperature rating of the installation. Joints and connections shall be made in accordance with the materials specified in Article IX of this chapter [~~applicable provisions of Chapter 30~~]. Condensate waste and drain line size shall be not less than ¾-inch (19 mm) nominal diameter from the drain pan connection to the place of condensate disposal. Where the drain pipes from more than one unit are manifolded together for condensate drainage, the pipe or tubing shall be sized in accordance with an *approved* method. Primary drain lines located in unconditioned spaces, except for crawl spaces, shall be insulated with foam plastic rubber-based insulation or other approved material with a minimum thickness of 3/8 inch.

Section M1411.8, Locking access port caps, is amended to read as follows:

M1411.9 ~~Locking~~ Access port caps. Refrigerant circuit access ports ~~located outdoors~~ shall be fitted with ~~locking-type tamper-resistant~~ caps ~~or shall be otherwise secured to prevent unauthorized access~~.

Section M2005.2, Prohibited locations, is amended as follows:

M2005.2 Prohibited locations. Fuel-fired water heaters shall not be installed in a room used as a storage closet. Water heaters located in a bedroom or bathroom shall be installed in a sealed enclosure so that *combustion air* will not be taken from the living space. Installation of direct-vent water heaters within an enclosure is not required. Storage type water heaters shall not be installed in an attic unless accessible from a door opening from the house on the same floor level. Water heaters installed in a garage having an ignition source shall be elevated such that the source of ignition is not less than 18 inches (457 mm) above the garage floor, unless the ignition source is listed as flammable vapor ignition

resistant. An electric water heater is the only type of water heater that may be installed under a stairway or landing.

Sec. 10-38. Fee schedule.

Residential plan review fees and residential permit fees apply to all separate additions, renovations, and installations to existing residential homes. See section 10-39 for fees for new residential construction.

Building	
Residential Plan Review Fees. See section 10-39 for new residential construction plan review fees.	
Valuation: $0—$24,000	$100.00
Valuation: $24,001—$200,000	$100.00 plus $1.38/1000, or fraction thereof, over $24,000
Valuation $200,001—$1,000,000	$342.88+$0.72/$1,000, or fraction thereof, over $200,000
Valuation $1,000,001+	$918.88+$0.17/$1,000, or fraction thereof, over $1,000,000
Construction for new homes valued under $100,000 will receive a 25% discount applied to the building plan review fees.	
Mobile home Installation	$50.00
Landscape Plan Review	
Base Fee	$27.50
Plus percent of the Building Plan Review Fee	11%
Residential Swimming Pool Plan Review Fee	Based upon valuation
Residential Plan Retrieval Fee	$100.00
Residential Permit Fees	
Residential Building Permit Fees. See section 10-39 for new residential construction building 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+$1.25/$1,000, or fraction thereof, over $75,000
*Homes valued under $100,000 will receive a 25% discount applied to the building permit fees.	
Residential Fence Permit	$25.00

Residential Swimming Pool Permit Fee	Based upon valuation with $30,000/minimum value
Residential Re-roof Permit	$25.00
Special Services Fees—Building Plan Review and Inspection	
Additional Plan Review (i.e., revised)—Per Reviewer per Hour (1 hour minimum)	$100.00
Administrative Exception/ Variance Request	$350.00
After-hours Plan Review—Residential—Building, Tree Preservation, Drainage (Per hour with 1.25 hour minimum)	$100.00

Inspection for which no fee is specifically indicated (per hour with 1 hour minimum)	$100.00
After-hour Inspection Review—per Reviewer per Hour (1 hour minimum)	$100.00
Link child-parent permits	$5.00/residential permit
Inspection Schedule Fee (Free on-line)	$3.00
Re-inspection Fee	$51.50
Residential Building Plan Application Administrative Processing Fee (free on-line)	$10.00
Permit extension fee	50% of permit
Building-related and Fire Codes Appeals and Advisory Board Fees	
Building-related and Fire Codes Appeal Fee	$155.00
Certificate of Occupancy	
Residential	
Temporary Residential Certificate of Occupancy	$150.00
Temporary Residential Certificate of Occupancy Extension	$75.00
Residential Construction Moving in without Certificate of Occupancy	$300.00
Registration Fees	
Homebuilders—Registration/2-year registration and renewal	$170.00
Home Improvement Contractor—Registration/2-year registration and renewal	$150.00
Home Improvement Contractor—Appeal	$155.00

Home Improvement Contractor—Duplicate Registration Card (plus tax)	$5.00
House Mover Contractor Registration	
House Mover – Registration/2-year registration and renewal	$120.00
Duplicate Registration Card (plus tax)	$5.00
Moving Buildings	
Moving buildings or structures	$100.00
Building Plan Review and Permit Fees	
Building plan review and building permit fees are based upon the project's square footage. For fee calculation purposes, building square footage shall be the total area of all floors under roof and enclosed within the outer surface of the outside enclosing walls or columns. The fees for each separate building shall be separately calculated.	
Residential Construction	
Miscellaneous Building Development Fees	
Permit Refund Fee	$50.00
Permit Reprint Fee (subject to sales tax)	$5.00
Permit Refund Fee	$50.00
Permit Amendment Fee	$10.00
Name, Address or DBA Change on Permit	$50.00
Notary Public	$3.00

Sec. 10-39. New residential construction fee schedule.

This fee schedule applies to new residential home construction. See section 10-38 for fees for separate additions, renovations, and installations to existing residential homes.

Fee Schedule for New Residential Construction										
	Basic Permit Fees							Optional Permit Fees		
SF Range	Building Permit	Electrical Permit	Mechanical Permit	General Plumbing Permit	Sewer Permit	Plan Review	Total Basic Permit Fees	TML Permit*	TOPS Permit*	Gas Permit*
0000-0500	$150	$100	$80	$60	$64	$200	$654	$57	$54	$64
0501-1000	$425	$100	$80	$119	$64	$200	$988	$57	$54	$64
1001-1250	$450	$100	$80	$128	$64	$200	$1,022	$57	$54	$64
1251-1500	$625	$100	$80	$132	$64	$200	$1,201	$57	$54	$64
1501-1750	$800	$100	$85	$145	$64	$200	$1,394	$57	$54	$64
1751-2000	$850	$100	$85	$149	$64	$200	$1,448	$57	$54	$64
2001-2250	$850	$100	$85	$151	$64	$200	$1,450	$57	$54	$64
2251-2500	$850	$100	$85	$156	$64	$200	$1,455	$57	$54	$64
2501-3000	$880	$110	$85	$164	$64	$200	$1,503	$57	$54	$64
3001-3500	$920	$110	$90	$178	$64	$400	$1,762	$57	$54	$64

	Basic Permit Fees							Optional Permit Fees		
SF Range	Building Permit	Electrical Permit	Mechanical Permit	General Plumbing Permit	Sewer Permit	Plan Review	Total Basic Permit Fees	TML Permit*	TOPS Permit*	Gas Permit*
3501-4000	$930	$120	$110	$190	$64	$400	$1,814	$57	$54	$64
4001-5000	$1,000	$125	$140	$207	$64	$400	$1,936	$57	$54	$64
5001-6000	$1,100	$125	$165	$223	$64	$400	$2,077	$57	$54	$64
6001-6500	$1,200	$150	$245	$283	$64	$600	$2,542	$57	$54	$64
6501-7000	$1,400	$150	$245	$342	$64	$600	$2,801	$57	$54	$64
7001-7250	$1,550	$200	$245	$351	$64	$600	$3,010	$57	$54	$64
7251-7500	$1,725	$200	$245	$355	$64	$600	$3,189	$57	$54	$64
7501-7750	$1,900	$200	$250	$368	$64	$600	$3,382	$57	$54	$64
7751-9000**	$2,000	$200	$250	$372	$64	$600	$3,486	$57	$54	$64
	*Optional Fees **For projects over ninety thousand (90,000) square feet, the fees are determined by combining smaller increments to equal the square footage.									

Secs. 10-40—10-45. Reserved.

ARTICLE V. EXISTING BUILDING CODE

Sec. 10-46. Adoption of *International Existing Building Code* (2021).

The 2021 edition of the *International Existing Building Code*, promulgated by the International Code Council, Section 101 and 102 of Chapter 1, and Chapters 2 through 16, 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 10-47. Provisions of this article are in addition to the provisions of the *International Existing Building Code*. The following provisions coinciding with the provisions of the *International Existing Building Code* supersede, repeal, or delete, when indicated, the corresponding provisions of the *International Existing Building Code*.

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

Sec. 10-47. Amendments to the adopted chapters of the *International Existing Building Code* (2021).

Additions to the *International Existing Building Code* (IEBC) are shown as underlined text. Deletions of the IEBC are shown as bracketed [~~strikethroughs~~].

Section 101.1, Title, is amended as follows:

> **101.1 Title.** These regulations shall be known as the Existing Building Code of San Antonio, Texas, [~~NAME OF JURISDICTION~~] herein referred to as "this code."

Section [A] 101.4.2, Buildings previously occupied, is amended by amending the reference to the International Property Maintenance Code to read as follows:

> **[A] 101.4.2 Buildings previously occupied.** The legal occupancy of any building existing on the date of adoption of this code shall be permitted to continue without change, except as is specifically covered in this code, the International Fire Code, or the San Antonio [~~International~~] Property Maintenance Code, or as is deemed necessary by the code official for the general safety and welfare of the occupants and the public.

Section 202, GENERAL DEFINITIONS, is amended by amending the definition for Change of Occupancy to read as follows:

> **CHANGE OF OCCUPANCY.** A change in the use of a building or a portion of a building that results in any of the following:
>
> 1. A change of occupancy classification.
> 2. A change from one group to another group within an occupancy classification.
> 3. any change in use within a group for which there is a change in application of the requirements of this code.
>
> Existing open buildings and structures that 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 are also considered a change of occupancy and fire sprinklers systems shall be installed for these change in occupancies in accordance with the applicable requirements of the *International Building Code* and *International Fire Code*. 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 306, ACCESSIBILITY FOR EXISTING BUILDINGS, is repealed in its entirety.

Section 502.6, Enhanced classroom acoustics, is deleted.

Section 503.16, Enhanced classroom acoustics, is deleted.

Section 503.18, Two-way communications systems, is deleted.

Section 506.5, Structural, is amended as follows, all other Code text remains as is:

506.5 Structural. [~~Any building undergoing a change of occupancy shall satisfy the requirements of this section.~~] The code official shall be authorized to require the compliance with this section.

Section 506.6, Enhanced classroom acoustics, is deleted.

Section 903.4, Enhanced classroom acoustics, is deleted.

Section 1011.2.1, Fire Sprinkler System, is amended as follows:

1011.2.1 Fire Sprinkler System. Where a change of occupancy classification occurs or where there is a change of occupancy within a space where there is a different fire protection system threshold requirement in Chapter 9 of the *International Building Code* that requires an automatic fire sprinkler system to be provided based on the new occupancy in accordance with Chapter 9 of the *International Building Code*. ~~The installation of the automatic sprinkler system shall be required within the area of the *change of occupancy* and areas of the building not separated horizontally and vertically from the change of occupancy by one of the following:~~

~~**1.** Nonrated permanent partition and horizontal assemblies.~~

~~**2.** Fire partition.~~

~~**3.** Smoke partition.~~

~~**4.** Smoke barrier.~~

~~**5.** Fire barrier.~~

~~**6.** Fire wall.~~

~~***Exceptions*:~~

~~1. An automatic sprinkler system shall not be required in a one- or two-family dwelling constructed in accordance with the International Residential Code.~~

~~2. Automatic sprinkler system shall not be required in a townhouse constructed in accordance with the International Residential Code.~~

3. ~~The townhouse shall be separated from adjoining units in accordance with Section R302.2 of the *International Residential Code*.~~

Section 1011.4, Enhanced classroom acoustics, is deleted.

Section 1101.4, Enhanced classroom acoustics, is deleted.

Section 1102.2, Area limitations, is amended by adding Section 1102.2.1, Fire wall alternative, as follows:

1102.2.1 Fire wall alternative. In other than Groups H, F-1 and S-1, fire barriers and floor and roof assemblies constructed in accordance with Sections 707 and 711, respectively, of the *International Building Code* shall be permitted to be used in lieu of fire walls to separate the existing building from an addition for the purpose of complying with the area limitations required for the new occupancy where all of the following conditions are met:

1. The buildings (existing building and addition) are protected throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 of the *International Fire Code.*
2. The maximum allowable area between fire barriers, horizontal assemblies, or any combination thereof shall not exceed the maximum allowable area determined in accordance with Chapter 5 of the *International Building Code* without an increase allowed for an automatic sprinkler system in accordance with Section 506 of the *International Building Code.*
3. The fire-resistance rating of the fire barriers and horizontal assemblies shall not be less than that specified for fire walls in Table 706.4 of the International Building Code.

   Exception: Where horizontal assemblies are used to limit the maximum allowable area, the required fire resistance rating of the horizontal assemblies shall be permitted to be reduced by 1 hour provided the height and number of stories increases allowed for an automatic sprinkler system by Section 504 of the *International Building Code* are not used for the buildings.

Sec. 10-48. Fee schedule.

See the fee schedule for the *International Building Code* above.

Secs. 10-49, 10-50. Reserved.

ARTICLE VI. ELECTRICAL CODE

Sec. 10-51. Adoption of National Electrical Code (2020).

The 2020 edition of the *National Electrical Code*, promulgated as a standard by the National Fire Protection Association, 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 10-52. Provisions of this article are in addition to the provisions of the *National Electrical Code*. The following provisions coinciding with the provisions of the *National Electrical Code* supersede, repeal, or delete, when indicated, the corresponding provisions of the *National Electrical Code*.

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

Sec. 10-52. Amendments to the adopted chapters of the National Electrical Code (2020).

Additions to the National Electrical Code (NEC) are shown as underlined text. Deletions of the NEC are shown as bracketed [~~strikethroughs~~].

Article 100, Definitions, is amended for Dwelling Unit to read as follows:

Dwelling Unit. A single unit, providing complete and independent living facilities for one or more persons, including permanent provisions for living, sleeping, cooking and sanitation to include free-standing habitable structures at dwellings.

Article 200.6, Means of Identifying Grounded Conductors, paragraphs (A), (A)(1), (A)(2), A (3) and paragraphs (B), (B)(1), (B)(2), (B)(3) and (B)(4) are amended as follows, with all other Code text remaining as is:

200.6. Means of Identifying Grounded Conductors.

(A) Sizes 10 [6] AWG or Smaller. An insulated grounded conductor of 10 [6] AWG or smaller shall be identified by one of the following means:

(A) (1) The insulated conductor shall have a continuous white outer finish shall be used on all systems with a voltage of less than 150 Volts between the grounded and ungrounded conductors.

(A) (2) The insulated conductor shall have a continuous gray outer finish shall be used on all systems with a voltage of 150 Volts or higher between the grounded and ungrounded conductors.

[~~(A) (3) [The insulated conductor shall have three continuous white or gray stripes along the conductor's entire length on other than green insulation.]~~]

(B) Sizes 8 ~~[4]~~ AWG or Larger. An insulated grounded conductor 8 ~~[4]~~ AWG or larger shall be identified by one of the following means:

(B) (1) A continuous white outer finish shall be used on all systems with a voltage of less than 150 Volts between the grounded and ungrounded conductors.

(B) (2) A continuous gray outer finish shall be used on all systems with a voltage of 150 Volts or higher between the grounded and ungrounded conductors.

[~~(B) (3) Three continuous white or gray stripes along the conductor's entire length on other than green insulation.~~]

(B) (3) ~~[(4)]~~ At the time of installation, by a distinctive white or gray marking tape at its terminations. The [~~This~~] marking tape shall encircle the conductor or insulation a minimum of two inches in length.

Article 200.7, Use of Insulation of a White or Gray Color or with Three Continuous White or Gray Stripes, is amended just on the title as follows; all other Code text remains as is in the NEC 2020:

200.7 Use of Insulation of a White or Gray Color or with Three Continuous White or Gray Stripes on Cables Listed in Article 334.

Article 210.5, Identification for Branch Circuits, paragraphs (C)(1)(a), (C)(2), (C)(2)(a) and (C)(2)(b) are amended as follows, all other Code text remains as is:

210.5 Identification for Branch Circuits.

(C). Identification of Ungrounded Conductors. Ungrounded conductors shall be identified in accordance with 210.5(C)(1) or (2), as applicable.

(1) Branch Circuits Supplied from More Than One Nominal Voltage System. Where the premises wiring system has branch circuits supplied from more than one nominal voltage system, each ungrounded conductor of a branch circuit shall be identified by phase or line and by system voltage class at all termination, connection, and splice points in compliance with 210.5(C)(1)(a) and (b). Different systems within the same premises that have the same system voltage class shall be permitted to use the same identification.

(a) *Means of Identification.* Conductors 10 AWG and smaller shall have factory colored insulation. Conductors 8 AWG and larger may have factory colored insulation or black insulation with a marking tape that encircles the insulation a minimum of two inches in length. Color of insulation or marking tape shall comply with the following table: [~~The means of identification shall be permitted to be by separate color coding, marking tape, tagging, or other approved means.~~]

UNGROUNDED CONDUCTOR IDENTIFICATION COLORS FOR ELECTRICAL SYSTEMS			
208Y/120 Volts	**120/240 Volts**	**480Y/277 Volts**	**120/240 Volts**
Three phase	**Three phase**	**Three phase**	**Single phase**
A - Black	A - Black	A - Purple	A - Black
B - Red	B - Orange (high leg)	B - Brown	B - Red
C - Blue	C - Blue	C - Yellow	

Informational Note 1: Conductors used for switch legs shall be the same color as the branch circuit conductors.

Informational Note 2: Conductors used for travelers may be of the same color as its associated switch leg or may be any of the above colors not used on the project. The colors designated for the grounded conductor, grounding conductors or for identification of the high leg may not be used for travelers.

Informational Note 3: In existing installations where modifications to the electrical system are required, and there is an established system of colors for ungrounded conductors, the existing color-coding system may continue to be used.

(2) Branch Circuits Supplied from Direct-Current Systems. Where a branch circuit is supplied from a dc system operating at more than 60 volts, each ungrounded conductor of 8 [~~4~~] AWG or larger shall be identified by polarity at all termination, connection, and splice points by marking tape, tagging, or other approved means; each ungrounded conductor of 10 [~~6~~] AWG or smaller shall be identified by polarity at all termination, connection, and splice points in compliance with 210.5(C)(2)(a) and (b). The identification methods utilized for conductors originating within each branch-circuit panelboard or similar branch-circuit distribution equipment shall be documented in a manner that is readily available or shall be permanently posted at each branch-circuit panelboard or similar branch-circuit distribution equipment.

(a) *Positive Polarity, Sizes 10 [~~6~~] AWG or Smaller.* Where the positive polarity of a dc system does not serve as the connection point for the grounded conductor, each positive ungrounded conductor shall be identified by one of the following means:

* * * * *

(b) *Negative Polarity, Sizes 10 ~~[6]~~ AWG or Smaller.* Where the negative polarity of a dc system does not serve as the connection point for the grounded conductor, each negative ungrounded conductor shall be identified by one of the following means:

Article 210.8, Ground-Fault Circuit-Interrupter Protection for Personnel, paragraph (B)Other Than Dwelling Units, is amended to add Number 13, all other code text remains as is:

(B) Other Than Dwelling Units. All 125-volt through 250-volt receptacles supplied by single-phase branch circuits rated 150 volts or less to ground, 50 amperes or less, and all receptacles supplied by three-phase branch circuits rated 150 volts or less to ground, 100 amperes or less, installed in the locations specified in 210.8(B)(1) through (B)[~~(12)~~](13) shall have ground-fault circuit-interrupter protection for personnel.

(13) Aircraft hangar

Article 210.8, Ground-Fault Circuit-Interrupter Protection for Personnel, paragraph (F)Outdoor Outlets, is deleted as follows, all other code text remains as is:

~~[(F) **Outdoor Outlets.** All outdoor outlets for dwellings, other than those covered in 210.8(A) (3), Exception to (3), that are supplied by single-phase branch circuits rated 150 volts to ground or less, 50 amperes or less, shall have ground-fault circuit-interrupter protection for personnel.~~

~~*Exception: Ground-fault circuit-interrupter protection shall not be required on lighting outlets other than those covered in 210.8(C)]*~~

* * * * *

Article 210.19, Conductors - Minimum Ampacity and Size, paragraph (A)Branch Circuits Not More Than 600 Volts, (1) General, (a) is amended as follows, all other code text remains as is:

210.19 Conductors - Minimum Ampacity and Size.

(a) Where a branch circuit supplies continuous loads or any combination of continuous and noncontinuous loads, the minimum branch-circuit conductor size shall have an ampacity not less than the noncontinuous load plus 125 percent of the continuous load in accordance with 310.14. No conductor smaller than 12 AWG copper or 8 AWG aluminum shall be used; however, conductors smaller than 12 AWG copper may be used for taps if part of an approved assembly.

Article 210.52, Dwelling Unit Receptacle Outlets, paragraph (B)(1) and its Exception No. 2 are amended as follows, all other code text remains as is:

(B) Small Appliances.

(1) Receptacle Outlets Served. In the kitchen, pantry, breakfast room, dining room, or similar area of a dwelling unit, the two or more 20-ampere small-appliance branch circuits required by 210.11(C)(1) shall serve all wall and floor receptacle outlets covered by 210.52(A), and all countertop outlets covered by 210.52(C) [~~, and receptacle outlets for refrigeration equipment~~]. Receptacle outlets for refrigeration equipment shall not be connected to the small- appliance branch circuits.

[~~Exception No. 2: In addition to the required receptacles specified by 210.52, a receptacle outlet to serve a specific appliance shall be permitted to be supplied from an individual branch circuit rated 15 amperes or greater.~~]

Article 210.70, Lighting Outlets Required, is amended to include 210.70(D); all other code text remains as is:

210.70 Lighting Outlets Required. Lighting outlets shall be installed where specified in 210.70(A), (B), [~~and~~] (C), and D.

(D) Open Lamps. Lighting outlets required by 210.70(A)(3) and 210.70(C) with open lamps shall be guarded where installed less than seven feet above the working surface measured directly below the lamp or where exposed to physical damage.

Article 215.12, Identification for Feeders, paragraphs (C)(1)(a), (C)(2), (C)(2)(a) and (C)(2)(b) are amended to read as follows:

215.12 Identification for Feeders.

(C) Identification of Ungrounded Conductors. Ungrounded conductors shall be identified in accordance with 215.12(C)(1) or (C)(2), as applicable.

(1) Feeders Supplied from More Than One Nominal Voltage System. Where the premises wiring system has feeders supplied from more than one nominal voltage system, each ungrounded conductor of a feeder shall be identified by phase or line and system at all termination, connection, and splice points in compliance with 215.12(C)(1)(a) and (b).

(a). *Means of Identification.* Feeders shall be color coded in accordance with Article 210.5(C)(1)(a). [~~The means of identification shall be permitted to be by separate color coding, marking tape, tagging, or other approved means~~.]

(2) Feeders Supplied from Direct-Current Systems. Where a feeder is supplied from a dc system operating at more than 60 volts, each ungrounded conductor of 8 [~~4~~] AWG or larger shall be identified by polarity at all termination, connection, and splice points by marking tape, tagging, or other approved means; each ungrounded conductor 10 [~~6~~] AWG or smaller shall be identified by polarity at all termination, connection, and splice points in compliance with 215.12(C)(2)(a) and (b). The identification methods utilized for conductors originating within each feeder panelboard or similar feeder distribution equipment shall be documented in a manner that is readily available or shall be permanently posted at each feeder panelboard or similar feeder distribution equipment.

(a). *Positive Polarity, sizes 10 [~~6~~] AWG or Smaller.* Where the positive polarity of a dc system does not serve as the connection for the grounded conductor, each positive ungrounded conductor shall be identified by one of the following means:

* * * * *

(b). *Negative Polarity, sizes 10 [~~6~~] AWG or Smaller.* Where the negative polarity of a dc system does not serve as the connection for the grounded conductor, each negative ungrounded conductor shall be identified by one of the following means:

* * * * *

Article 220.14, Other Loads - All Occupancies, paragraph J is amended as follows, all other code text remains as is:

220.14 Other Loads - All Occupancies.

(J) Dwelling Units. In one-family, two-family, and multifamily dwellings, the minimum unit load shall be not less than 33 volt-amperes/m^2 (3 volt-amperes /ft^2). The lighting and receptacle outlets specified in 220.14(J)(1), (J)(2), and (J)(3) are included in the minimum unit load. No additional load calculations shall be required for such outlets. The minimum lighting load shall be determined using the minimum unit load and the floor area as determined in 220.11 for dwelling occupancies. Motors rated less than 1/8 hp and connected to a lighting circuit shall be considered part of the minimum lighting load. A maximum load of 1440 VA, consisting of receptacles at 180 VA each plus luminaires at their maximum allowed lamp wattage shall be permitted on a 15 A branch circuit

and a maximum load of 1920 VA, consisting of receptacles at 180 VA each plus luminaires at their maximum allowed lamp wattage shall be permitted on a 20 A branch circuit. When using the optional VA method in lieu of the total number of outlets described in the previous sentence, the VA load shall be computed in accordance 210.20(A) - receptacles at 100% plus luminaires at 125%.

(1) All general-use receptacle outlets of 20-ampere rating or less, including receptacles connected to the circuits in 210.11(C)(3) and 210.11(C)(4)

(2) The receptacle outlets specified in 210.52(E) and (G)

(3) The lighting outlets specified in 210.70(A) and (B)

Article 225.30(B), Common Supply Equipment, is repealed in its entirety.

Article 230.2, Number of Services, paragraph F is added as follows, all other code text remains as is:

230.2 Number of Services. A building or other structure served shall be supplied by only one service unless permitted in 230.2(A) through (D). For the purpose of 230.40, Exception No. 2 only, underground sets of conductors, 1/0 AWG and larger, running to the same location and connected together at their supply end but not connected together at their load end shall be considered to be supplying one service.

(F) Color Coding. Service entrance conductors shall be color coded in accordance with Article 210.5(C)(1)(a).

Article 230.82, Equipment Connected to the Supply Side of Service Disconnect, is amended as follows, all other code text remains as is:

230.82 Equipment Connected to the Supply Side of Service Disconnect. Only the following equipment shall be permitted to be connected to the supply side of the service disconnecting means:

(5) Conductors used to supply load management devices, circuits for standby power systems, fire pump equipment, and fire and sprinkler alarms, if provided with service equipment and install in accordance with requirements for service-entrance conductors. Such connections shall not be made within service equipment enclosures.

(6) Solar photovoltaic systems, fuel cell systems, wind electric systems, energy storage systems, or interconnected electric power production sources, if provided with a disconnecting means listed as suitable for use as service equipment, and overcurrent protection as specified in Part VII of Article 230. Such connections shall not be made within service equipment enclosures.

Article 240.24, Location in or on Premises, paragraph (D) is amended as follows, all other code text remains as is:

240.24 Location in or on Premises.

(D) Not in Vicinity of Easily Ignitable Material. Newly installed [~~O~~]overcurrent devices shall not be located in the vicinity of easily ignitable material, such as in clothes closets, storage rooms, janitor rooms, and similar. Replacements per the International Existing Building Code are permitted in existing location.

Article 250.52, Grounding Electrodes, paragraphs (A)(3)(1) and (A)(5)(b) are amended as follows, all other code text remains as is:

250.52 Grounding Electrodes.

(A) Electrodes Permitted for Grounding.

(3) Concrete-Encased Electrode. A concrete-encased electrode shall consist of at least 6.0 m (20 ft) of either (1) or (2):

(1) One or more bare or zinc galvanized or other electrically conductive coated steel reinforcing bars or rods of not less than 13 mm (1/2 in.) in diameter, installed in one continuous 6.0 m (20 ft) length, or if in multiple pieces connected together by the usual steel tie wires, exothermic welding, welding, or other effective means to create a 6.0 (20 ft) or greater length; or

Informational Note to (A)(3)(1): A piece of reinforcing steel conforming to (1) above which has additional length, without splice, extended up past the sole plate of the structure to which the grounding electrode may be connected to and extended to the service equipment is acceptable. The portion of the reinforcing steel extending above the sole plate shall be painted green and the paint removed from the bar where the connection is made to the grounding electrode conductor.

(5) Rod and Pipe Electrodes. Rod and pipe electrodes shall not be less than 2.44 m (8 ft) in length and shall consist of the following materials.

(b) Rod-type grounding electrodes of stainless steel and copper or zinc coated steel shall be at least 15.87 mm (5/8 in.) in diameter [~~, unless listed~~].

Article 250.118, Types of Equipment Grounding Conductors, the first sentence of Paragraph 118 is amended as follows, all other code text remains as is:

250.118 Types of Equipment Grounding Conductors.

As a minimum, the equipment grounding conductor shall consist of a conductor as described in item (1) as follows and may be supplemented by any of the other means described in items (2) through (14) as follows: [~~The equipment grounding conductor run with or enclosing the circuit conductors shall be one or more or a combination of the following:~~]

Article 250.119, Identification of Equipment Grounding Conductors, paragraphs (A), (A)(1) and its Exception and (A)(2)c are amended as follows, all other code text remains as is:

250.119 Identification of Equipment Grounding Conductors.

(A) Conductors 8[4] AWG and Larger. Equipment grounding conductors 8 [~~4~~] AWG and larger shall comply with 250.119(A)(1) and (A)(2).

(1) An insulated or covered conductor 8 [~~4~~] AWG and larger shall be permitted, at the time of installation, to be permanently identified as an equipment grounding conductor at each end and at every point where the conductor is accessible.

***Exception**: Conductors 8 [4] AWG and larger shall not be required to be marked in conduit bodies that contain no splices or unused hubs.*

(2) Identification shall encircle the conductor and shall be accomplished by one of the following:

c. Marking the insulation or covering with green tape, a minimum of two inches in length, or green adhesive labels at the termination

Article 314.19, Boxes Enclosing Flush Devices or Flush Equipment, is amended as follows:

314.19 Boxes Enclosing Flush Devices or Flush Equipment. Boxes used to enclose flush devices or flush equipment shall be of such design that the devices or equipment will be completely enclosed on the back and sides, and substantial support for the devices or equipment will be provided. Screws for supporting the box shall not also be used to attach a device or equipment. Boxes for flush devices or equipment shall have a minimum volume of 221 cm^3 (13.5 $in.^3$).

ARTICLE 330.6, Listing Requirements, is amended as follows:

330.6 Listings Requirements. Type MC cable shall be listed. Fittings used for connecting type MC cable to boxes, cabinets, or other equipment shall be listed and identified for such use. Additionally, all fittings shall be equipped with an anti-shorting bushing.

Article 330.112, Insulation, is amended as follows with all other code provisions (A & B) remaining as is:

330.112 Insulation. Insulated conductors shall comply with 330.112(A) or (B) and shall be color coded per the requirements of this chapter.

Article 330.116, Sheath, is amended as follows:

330.116 Sheath. Metallic covering shall be one of the following types: smooth metallic sheath, corrugated metallic sheath, or interlocking metal tape armor. The metallic sheath shall be continuous and close fitting. A nonmagnetic sheath or armor shall be used on single conductor Type MC. Supplemental protection of an outer covering of corrosion-resistant material shall be permitted and shall be required where such protection is needed. The sheath shall not be used as a current-carrying conductor. The cutting of the interlocking metal tape armor shall be performed with an approved rotary cutting tool designed for cutting MC cable.

Article 406.12, Tamper-resistant Receptacles, is amended to include 406.12 (9) and (10); all other code text remains as is:

(9) Public areas of assembly occupancies where children might be present

(10) All areas accessible to patients

Article 408.30, General, is amended as follows:

408.30 General. All panelboards shall have a rating not less than the minimum feeder capacity required for the load calculated in accordance with Part III, IV, or V of Article 220, as applicable. Panelboards containing the 120 Volt branch circuits serving the interior of one- and two-family dwelling units shall be located in the interior of the structure in a readily accessible location.

Article 410.36, Means of Support, (B) Suspended Ceilings is amended as follows; All other code text remains as is:

410.36 Means of Support.

(B) Framing members of suspended ceilings systems used to support luminaires shall be securely fastened to each other and shall be securely attached to the building structure at appropriate intervals. Luminaires shall be securely fastened to the ceiling framing member by mechanical means such as bolts, screws, or rivets. Listed clips identified for use with the type of ceiling framing members(s) and luminaire(s) shall also be permitted. Two independent support wires per luminaire on opposing corners shall be permitted when installed in accordance with 300.11(B).

Article 517.10, Applicability, (B) Not Covered is amended as follows; All other code text remains as is:

517.10 Applicability.

(B) Not Covered. Part II shall not apply to the following:

(3) Areas used exclusively for any of the following purposes:

a. Intramuscular injections (immunizations)

b. Psychiatry and psychotherapy

c. Alternative medicine

[~~d. Optometry~~]

Article 525.20, Wiring Methods, (B) Single-Conductor is amended as follows; All other code text remains as is:

525.20 Wiring Methods.

(B) Flexible Cords and Single-Conductor Cables. Flexible cords shall be permitted only in sizes 12 AWG or larger and shall contain a separate grounding conductor. A maximum of one 25-foot (7.65 m) extension cord may be connected to each individual receptacle provided as part of the manufacturers listed generator. Single-conductor cable shall be permitted only in sizes 2 AWG or larger.

Article 604.10, Uses Permitted, Exception No. 1, and Article 604.100, Construction, paragraph (A)(1) Cables are amended as follows; All other code text remains as is:

604.10 Uses Permitted.

***Exception** No.1: In concealed spaces, one end of tapped cable shall be permitted to extend into hollow walls of manufactured wall systems, with removable panels for access to the wiring system, for direct termination at switch and outlet points.*

Article 680.23, Underwater Luminaires, (A)General (4) is amended as follows; All other code text remains as is:

680.23 Underwater Luminaires.

(A) General.

(4) Voltage Limitation. No luminaires shall be installed for operation on supply circuits over 150 volts between conductors and the limits are 15 volts ac or 30 volts dc at the luminaire.

Sec. 10-53. Electrical provisions.

(a) General. The provisions of this section shall apply to the design, construction, installation, use and maintenance of electrical systems and equipment. Where differences occur between provisions of this Code and referenced codes or standards, the provisions of this Code shall apply.

(b) Equipment and door labeling. The disconnecting means for each service, feeder or branch circuit originating in a switchboard or panelboard shall be legibly and durably marked to indicate its purpose unless such purpose is clearly evident to the code official. Doors into electrical panel rooms shall be marked with a plainly visible and legible sign stating ELECTRICAL ROOM or similar approved wording.

(c) TOPS (Temporary on Permanent Set) permit. The section outlines the requirements for obtaining a permit to allow the connection of the new or existing electrical service to CPS Energy prior to having all final inspections completed on a project. The issuance of a TOPS permit and the subsequent connection to the utility company service does not allow an owner or the occupants to occupy the building or structure until a C of O has been issued. The above permit does not waive any of the applicable provisions of articles IV and VIII.

(1) **Sec. 10-1302.3.1 Permit Application.** A licensed electrical contractor registered with the city must make the application for the TOPS permit. The electrical contractor must also request that

the TOPS permit be attached to the main building permit in the city's computer system. The TOPS permit is required in addition to the main electrical permit for the project.

(2) The following are the general conditions for obtaining a TOPS permit for new construction and may be modified by the code official to suit project specific conditions:

a. The electrical service must be complete along with all grounding requirements, and the electrical conductors originating from the service equipment must be terminated in an approved electrical manner.

b. The building permit on residential construction shall have an approved foundation and complete frame inspection. The building permit on commercial construction shall have a complete foundation and at minimum a partial frame inspection.

c. On residential construction all trade permits must have approved rough-ins and a complete plumbing top out. On commercial construction all trade permits must have a minimum of a partial rough in including a partial plumbing top out.

d. The plumbing sewer permit shall have an approved final inspection on both commercial and residential.

(3) **Existing construction.** The following are the general conditions for obtaining a TOPS permit for existing construction and may be modified by the code official to suit project specific conditions:

a. The electrical service must be in good condition and comply with the city electrical code including all grounding requirements.

b. The electrical loads originating from the existing service equipment, that will not be utilized for construction power, must be disconnected, and safeguarded from accidental contact with an energized electric bus bar.

c. Temporary GFCI protected outlets must be provided at the service equipment location to be used during construction related activities.

d. All necessary and or required trade permits must be obtained prior to giving a final approval to CPS to energize the service equipment.

(d) Electrified fences or barriers. Electrified fences or barriers conforming to the following requirements shall be permitted:

(1) Electrified fences or barriers shall conform to the requirements of the International Electrotechnical Commission (IEC) Standard IEC 60335-1 - Household and similar electric appliances - Safety - Part 1: General Requirements (Reference number IEC 60335-1:2001+A1:2004(E)) and Standard IEC 60335-2 - Household and similar electric appliances - Safety - Part 2-76: Particular requirements for electric fence energizers (Reference number CEI/IEC 60335-2-76:2002+A1:2006) or Underwriters Laboratories Inc. (UL) Standard number 60335-2. Safety of Household and Similar Electrical Appliances, Part 1: General Requirements have.

(2) Electrified fences or barriers shall be limited to outdoor storage areas only in zoning designations: Commercial (C-2 and C-3), Light Industrial District (L), General Industrial District (I-1) and Heavy Industrial District (I-2). Unless specifically designated in this subsection, electrified fences or barriers shall not be permitted in any zoning district.

(3) The exterior (public side) perimeter of the electrified fence or barrier shall be protected by an additional non-electrified fence or wall and shall be separated by six (6) inches.

(4) The height of the non-electrified fence or wall shall be no less than six (6) feet in height and no more than eight (8) feet in height at its highest point.

(5) The height of the electrified fence or barrier shall be no more than ten (10) feet in height at its highest point measured at existing grade.

(6) Electrified fences or barriers shall be clearly marked with warning signs. The warning signs shall be placed at each entrance to the property on the electrified fence or barrier and a maximum of forty (40) feet on centers thereafter around the entire perimeter of the electrified fence. The warning signs shall be placed above the non-electrified fence or wall and be clearly visible from the ground on both sides of the electrified fence or barrier. The warning signs shall be printed on both sides with the following "WARNING ELECTRIFIED FENCE" and contain the international symbol for an electrical hazard. The wording shall be written in both English and Spanish. In addition each entrance shall have a sign noting: "Electric Barrier registered with the San Antonio Development Services Department - City Code 10-53(e)." These signs will be reflective with a minimum two-inch letter height, minimum stroke of one-half (0.5) inch and with a contrasting background. Arabic numbers and alphabetical letters shall be used.

(7) Electrified fences or barriers may be energized only during the hours when the general public does not have legal access to the protected property.

(8) Electrified fences or barriers shall not be installed within five feet of a sidewalk or public right-of-way. They shall also not be installed within one hundred fifty (150) feet of a property line for a residence, or from a public, private, or parochial school day care facility unless the exterior perimeter non-electrified fence is covered with a solid "see-through" covering (e.g., solid mesh, slats, etc.) to further prevent contact with the electrified fence and meets the City's traffic clear vision requirements for intended site.

(9) Electrified fences or barriers must be designed and certified by an authorized representative of the fence or barrier equipment manufacturer. Upon completion of fence or barrier installation, the fence or barrier equipment manufacturer shall certify that the installation meets all of its design and safety requirements.

(10) Electrified fences or barriers must be permitted with the development services department and on an annual basis with a notarized statement attached to the renewal permit from an authorized representative of the fence or barrier equipment manufacturer that the installation is currently operating in conformity with its safety requirements.

(11) The owner of the stated security equipment and the commercial property owner(s) are required to carry general liability insurance in a minimum amount of one million dollars ($1,000,000.00) in the aggregate each. Further, proof of insurance shall be required as a condition precedent to secure a permit as required in this subsection and upon each subsequent annual renewal. A failure to maintain proof of insurance for the permitted year shall result in a revocation of the issued permit. Proof of minimum coverage amounts maintained for the preceding year must be provided with each application for renewal. Failure to maintain coverage for the entire previous year shall result in a denial of any permit renewal for five (5) years from the date of expiration or revocation. Proof of insurance shall be underwritten by an organization licensed/authorized to do business in the state.

(12) A permit holder's decision to appeal acts to modify the provisions of section 10-14(b), Limitations of authority contained in this chapter and does not require acquiescence of the *Building Official* to appeal his decision. Procedures outlined in section 10-14 of this chapter shall be followed unless specifically modified herein. The *Building Official* shall be authorized to revoke a permit upon the recommendation of the chief of police or designee, itself based on and supported by evidence of violation of this chapter. The *Building Official* or designee must send a notice of revocation to the last known address of the permit holder with such notice detailing a time of no more than 10 working days to appeal the *Building Official* 's decision. Notice of appeal must be sent as soon as practical, but no later than 10 working days past the revocation. The *Building Official*'s decision shall be final upon the expiration of the 10 working day period. A filed appeal shall suspend the *Building Official*'s action to revoke the permit. A permit holder shall be entitled to a hearing before the next reasonably available meeting of the building-related and fire codes appeals and advisory board and it shall either affirm or deny the *Building Official*'s decision. The board's decision shall be based on the same evidence reviewed by the *Building Official* and any subsequent information produced.

(13) Electrified fences or barriers shall have a Knox box installed in a location acceptable to the police and fire departments to de-energize the electrified fence or barrier. The Knox box shall be illuminated to a minimum one-foot candle.

(14) The power source and Knox box for the electrified fence or barrier shall be installed by an electrical contractor. The power source shall consist of, but not be limited to, the energizer, battery, a means of maintaining a charge on the battery and the load side conductors from the energizer to the perimeter fence conductors.

(e) Electrical inspections supervisor. The electrical inspections supervisor of the development services department shall also serve as the master of record for electrical work performed by city electricians.

Sec. 10-54. Fee schedule.

Electrical License and Registration Fees	
Master	
Renewal—City license (two-year renewal)	$300.00
DBA change on master electrical license	$20.00
Journeyman—Renewal of city license (two-year renewal)	$200.00
Maintenance technician—Annual (may only perform work not requiring a permit)	$35.00
Electrical Inspection Fee	
Electrical inspection permit fee (basic fee). See section 10-39 for new residential construction electrical inspection fee.	$50.00
Service rating:	
0—200 amps	$3.25
201—600 amps	$6.50
601—1000 amps	$8.65
1001—2500 amps	$10.80
Over 2500 amps	$12.50
Temporary meter loop (TML). See section 10-39 for new temporary meter loop fee.	$2.15
Temporary on permanent sets (TOPS). See section 10-39 for temporary on permanent sets fee.	$2.15
Work with CPS	$2.15
Gear items	
Switchboards up to four handles	$10.25
Switchboards each additional handle	$1.60

Panelboards/loadcenters	$4.85
Xmfr 1—50 kva	$4.30
Xmfr over 50 kva	$9.70
Safety switch or circuit breaker 30 amps and over	$1.10
Miscellaneous items	
Underground work per 100 linear ft	$1.60
Outside overhead work per 100 linear ft	$1.60
Foundation/concrete encased electrode	$1.60
Controls/low voltage systems over 50 volts	$1.60
Commercial/industrial repair	$9.75
Light fixtures	
HID fixtures	$1.60
Ceiling fans	$1.60
Fluorescent fixtures/ballast retrofits	$.16
Sign circuit	$1.10
General purpose outlets/devices/equipment less than one hp	$.16
Dedicated equipment/appliance outlets 20 amps and over	$1.50
Motors	
1—7.5 hp	$2.15
7.5—25 hp	$3.25
25—50 hp	$8.10
Over 50 hp	$10.80
UPS/generator/distributed generation/storage batteries	
1—5 kw	$1.60
5—50 kw	$3.25
51—300 kw	$4.85
Over 301 kw	$6.50
Temporary wiring	
Power/lights (per every ten outlets)	$3.25
Festival booths	$5.00
Carnival rides	$5.00

Special occupancies	
Class 1, 2, or 3, of article 500 (per each circuit)	$1.00
Medical equipment (MRI, X-ray, scanners, etc.) each circuit	$1.00
Miscellaneous electrical permits Reconnect	
Reconnect inspection	$50.00
30-day (cleaning)	$2.15
180-day (leasing)	$12.89
Maintenance permit fee (electric only)	
Basic permit fee	$50.00
Plus per residential apartment unit	$0.21
Plus per 10,000 sq. ft. of commercial space	$7.00
Building-related and Fire Codes Appeals and Advisory Board Fees	
Building-related and Fire Codes Appeal Fee	$155.00
Special Services for Electrical	
After-hour inspection fee (per hour with one-hour minimum)	$100.00
Electrical plan review only (without building plan number)— (per hour with one-hour minimum)	$100.00
Inspection for which no fee is specifically indicated (per hour with one-hour minimum)	$100.00
Inspection schedule fee (free on-line)	$3.00
Permit processing fee	$10.00
Permit extension fee	50% of permit (plus cost of permit)
Re-inspection fee	$51.50
Permit refund fee	$50.00
Open permit review fee	$3.00/permit
Permit amendment fee	$10.00
Link child permit to parent permit fee	$5.00
Contractor number research fee	$10.00
Duplicate copy of city issued electrical license	$10.00
Rental of facility fees: $125.00/hr (daily min. fee of $250.00; max fee of $1,000.00); security personnel—$15.00/hour/staff (with one-hour minimum); DSD staff—$30.00/hour/staff (with one-hour min.); custodian service—$15.00/hour (with two-hour min.)	

Secs. 10-55—10-60. Reserved.

ARTICLE VII. MECHANICAL CODE

Sec. 10-61. Adoption of *International Mechanical Code* (2021).

The 2021 edition of the *International Mechanical Code*, promulgated by the International Code Council, Chapters 2 through 15 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 10-62. Provisions of this article are in addition to the provisions of the *International Mechanical Code*. The following provisions coinciding with the provisions of the *International Mechanical Code* supersede, repeal, or delete, when indicated, the corresponding provisions of the *International Mechanical Code*.

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

Sec. 10-62. Amendments to the adopted chapters of the *International Mechanical Code* (2021).

Additions to the *International Mechanical Code* (IMC) are shown as underlined text. Deletions of the IMC are shown as bracketed [~~strikethroughs~~].

Section 202, GENERAL DEFINITIONS, is amended by adding the following definition:

NFPA 70. The National Electrical Code, as amended by Article VI of this Code.

Section 301.10, Electrical, is amended as follows:

301.10 Electrical. Electrical wiring, controls and connections to equipment and appliances regulated by this code shall be in accordance with NFPA 70. All wiring, including control wiring, exposed to weather shall be installed in a raceway approved for the environment.

Section 304, INSTALLATION, is amended by adding Section 304.13 Installation at gas valve, as follows:

304.13 Installation at gas valve. Minimum Schedule 40 metallic pipe shall be installed at the gas valve and extended a minimum of two inches outside the gas furnace and gas rooftop unit's casing and may be connected to an approved listed flexible gas connector.

Section 306.3, Appliances in attics, is amended by adding 306.3.2 Access for cooling or heating appliance, as follows:

306.3.2 Access for cooling or heating appliance. For one-and two-family residential occupancies and townhomes with newly installed cooling or heating appliances in the attic space, a permanent ladder, fold-away ladder, or direct access door opening from the house on the same floor level shall be installed.

Section 307.2.1, Condensate disposal, is deleted and replaced with the following text:

307.2.1 Condensate disposal. Condensate disposal shall be in accordance with Chapter 34, Section 34-274 of the City Code of San Antonio. [~~Condensate from all cooling coils and evaporators shall be conveyed from the drain pan outlet to an approved place of disposal. Such piping shall maintain a minimum horizontal slope in the direction of discharge of not less than one-eighth unit vertical in 12~~

~~units horizontal (1-percent slope). Condensate shall not discharge into a street, alley or other areas so as to cause a nuisance.~~]

Section 307.2.1.1, Condensate discharge, is amended as follows:

307.2.1.1 Condensate discharge. Condensate drains shall not directly connect to any plumbing drain, waste, or vent pipe. Condensate drains shall not discharge into a plumbing fixture other than a floor sink, floor drain, trench drain, mop sink, hub drain, standpipe, utility sink or laundry sink. Condensate drain connections to a lavatory wye branch tailpiece or to a bathtub overflow pipe shall not be considered as discharging to a plumbing fixture. Except where ~~[discharging to grade outdoors]~~ installed per Chapter 34, Section 34-274 of the City Code of San Antonio, the point of discharge of condensate drains shall be located within the same occupancy, tenant space or dwelling unit as the source of the condensate.

Section 307.2.2, Drain pipe materials and sizes, is amended as follows; All other code text remains as is:

307.2.2 Drain pipe materials and sizes. Components of the condensate disposal system shall be ABS, cast iron, copper, and copper alloy, CPVC, cross-linked polyethylene, galvanized steel, PE-RT, polyethylene, polypropylene, PVC or PVDF pipe or tubing. Components shall be selected for the pressure and temperature rating of the installation. Joints and connections shall be made in accordance with the applicable provisions of Chapter 7 of the *International Plumbing Code* relative to the material type. Condensate waste and drain line size shall be not less than ¾-inch pipe size and shall not decrease in size from the drain pan connection to the place of condensate disposal. Where the drain pipes from more than one unit are manifolded together for condensate drainage, the pipe or tubing shall be sized in accordance with Table 307.2.2. Primary drain lines located in any unconditioned space, except for crawl spaces, shall be insulated with foam plastic rubber-based insulation or approved material with a minimum thickness of 3/8 inch.

Section 307.2.4.1, Ductless mini-split system traps, is amended as follows:

307.2.4.1 Ductless mini-split system traps. Ductless mini-split equipment that produces condensate shall be [~~provided with an in-line check valve located in the drain line, or a trap~~] in accordance with their manufacturers' recommendations.

Section 504.4.1, Termination location, is amended as follows:

504.4.1 Termination location. Exhaust duct terminations shall be in accordance with the dryer manufacturer's installation instructions. Where the manufacturer's instructions do not specify a termination location, the exhaust duct shall terminate not less than 3 feet (914 mm) in any direction from openings into buildings, including openings in ventilated soffits or any mechanical equipment.

Section 606.2, Where required, is amended as follows; All other code text remains as is:

606.2 Where required. Smoke detectors shall be installed where indicated in Section 606.2.1 through 606.2.3 or in accordance with NFPA 90A "Standard for the Installation of Air Conditioning and Ventilating Systems."

Section 1101.9, Locking access port caps, is amended to read as follows:

1101.9 ~~Locking~~ Access port caps. Refrigerant circuit access ports ~~located outdoors~~ shall be fitted with ~~locking-type tamper-resistant~~ caps ~~or shall be otherwise secured to prevent unauthorized access~~.

~~This section shall not apply to refrigerant circuit access ports on equipment installed in controlled areas such as on roofs with locked access hatches or doors.~~

Section 1102.3, Access port protection, is deleted.

[~~**1102.3 Access port protection.** Refrigerant access ports shall be protected in accordance with Section 1101.10 whenever refrigerant is added to or recovered from refrigeration or air-conditioning systems.~~]

Sec. 10-63. Fee schedule.

Heating and Air Conditioning (Mechanical)	
Heating and Air Conditioning (Mechanical) License Fees	
Master Renewal—City License per year	$150.00
Technician (journeyman) (may only perform work not requiring a permit)—Renewal	$35.00
Heating and Air Conditioning (Mechanical) Inspection Fees	
Basic Heating and Air Conditioning (Mechanical) Permit (Basic Fee). See section 10-39 for new residential construction basic heating and air conditioning permit fee.	$50.00
Residential (new systems) (includes inspection fee)	$77.00
Each Additional System (includes inspection fee)	$55.00
Roof-Top Unit (gas or electric)	$15.85
Gas furnace; gas wall furnace; gas unit heater; gas radiant heater; gas boiler (steam); gas floor furnace; commercial gas dryer; gas boiler (hot water); gas duct heater (per each item)	$9.60
Condensing unit; condensing unit/heat pump; indoor condensing unit; cooling coil; commercial exhaust fan; condenser (no compressor); commercial electric dryer; fan coil unit; fan powered box; type II range hood (steam); chiller; absorption unit; reach-in cooler; wall mounted unit; make-up air; heat pump; refrigeration unit; air handler; mini splits; electric furnace; electric unit heater; electric radiant heater; ventilation fan; variable air volume unit; type I range hood (grease); fume hood; cooling tower; walk-in cooler; icemaker (split system); evaporative cooler (refrigeration equipment); hot water coil; remote condensing unit; condenser (refrigeration equipment); ventilating fan (not on other permitted installation); hood served by mechanical exhaust (including ducts and	$6.25

makeup air systems); condensing unit (mobile homes and manufactured housing); any regulated device for which no specific fee is listed; replacement of any device which originally required a permit (per each item)	
Curtain Fire Damper; Smoke Damper; Duct Outlet; Ceiling Fire Damper; Smoke/Fire Damper (per each item)	$2.00
Building-related and Fire Codes Appeals and Advisory Board Fees	
Building-related and Fire Codes Appeal Fee	$155.00
Special Heating and Air Conditioning (Mechanical) Fees	
After-hour Inspection Fee (per hour with 1 hour minimum)	$100.00
Inspection for which no fee is specifically indicated (per hour with 1 hour minimum)	$100.00
Permit Processing Fee	$10.00
Inspection Schedule Fee (Free on-line)	$3.00
Mechanical Plan Review—This fee is charged to review plans without a building permit (per hour with a 1 hour minimum)	$100.00
Permit Extension Fee	50% of permit (plus cost of permit)
Re-inspection Fee	$51.50
Open Permit Review Fee	$3.00/Permit
Annual Continuing Education for City Licenses Holder	$150.00
Permit Refund Fee	$50.00
Permit Amendment Fee	$10.00
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.)	

Secs. 10-64—10-70. Reserved.

ARTICLE VIII. GAS CODE

Sec. 10-71. Adoption of *International Fuel Gas Code* (2021).

The 2021 edition of the *International Fuel Gas Code*, Chapters 2 through 8 and Appendices A through C, promulgated by the International Code Council, 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 10-72. Provisions of this article are in addition to the provisions of the *International Fuel Gas Code*. The following provisions coinciding with the provisions of the *International Fuel Gas Code* supersede, repeal, or delete, when indicated, the corresponding provisions of the *International Fuel Gas Code*.

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

Sec. 10-72. Amendments to the adopted chapters and appendices of the *International Fuel Gas Code* (2021).

Additions to the *International Fuel Gas Code* (IFGC) are shown as underlined text. Deletions of the IFGC are shown as bracketed [~~strikethroughs~~].

Section 202, GENERAL DEFINITIONS, is amended by adding the following definition:

NFPA 70. The National Electrical Code, as amended by Article VI of this Code.

Section 301 (IFGC), GENERAL, is amended by adding Section 301.16, Separation from electrical lines in a ditch, to read as follows:

301.16 Separation from electrical lines in a ditch. When outside the footprint of the building, no plumbing, gas, sewer, or water piping shall be installed in the same ditch with electric lines unless a separation of 36 inches (914 mm) horizontally is maintained.

Section 401.5, Identification, is amended to include a second paragraph to read as follows:

401.5 Identification. For other than steel pipe, exposed *piping* shall be identified by a yellow label marked "Gas" in black letters. The marking shall be spaced at intervals not exceeding 5 feet (1524 mm). The marking shall not be required on pipe located in the same room as the *appliance* served.

All medium pressure gas piping systems shall identify its operating gas pressure with an approved metallic tag and the following wording shall be stamped into the tag at the meter:

WARNING
1-5 psi gas pressure
Do Not Remove

Section 403.4.2, Steel, is amended as follows:

403.4.2 Steel. Steel, stainless steel and wrought-iron pipe shall be not lighter than Schedule 40 [10] and shall comply with the dimensional standards of ASME B36.10M and one of the following standards;

1. ASTM A53/A53M.

2. ASTM A106.

3. ASTM A312.

Section 403.5.5, Corrugated stainless steel tubing, is amended as follows:

403.5.5 Corrugated stainless steel tubing. Corrugated stainless steel tubing shall be listed with an arc-resistant jacket or coating system in accordance with ANSI LC 1/CSA 6.26 starting 90 days after the adoption of this code.

Section 403.9, Metallic piping joints and fittings, is amended by adding section 403.9.6, Welded pipe, as follows:

403.9.6. Welded pipe. All welded joints in piping system shall be welded by a certified pipe welder as defined in Article II of this chapter.

Section 404.2, CSST, is amended by adding sections 404.2.1, Meter loop, and 404.2.2, Exterior walls; as follows:

404.2.1 Meter loop. CSST is prohibited in the meter loop.

404.2.2 Exterior walls. CSST is prohibited in exterior walls.

Section 404.6, Underground penetrations prohibited, is amended by adding the following exception:

404.6 Underground penetrations prohibited. Gas piping shall not penetrate building foundation walls at any point below grade. Gas piping shall enter and exit the building at a point above grade and the annular space between the pipe and the wall shall be sealed.

***Exception*:** Gas piping may penetrate a slab-on-grade foundation, above or below grade, where the installation complies with Section 404.14.

Section 406.4.1, Test pressure, is deleted and replaced with the following text:

406.4.1 Test pressure. The rough-in piping inspection shall include testing by closing all openings and subjecting the pipes to an air pressure that will support a column of mercury 15 inches (381 mm) in height or a 10-psi air test. For gas systems with pressures in excess of 14 inches of water column, the test pressure shall not be less than 1.5 times the operating pressure for the system and shall hold this pressure for a minimum of 30 minutes.

The final inspection shall include a column of mercury six inches (152 mm) in height or of a five-psi air test with appliance shut-off valves attached thereto. For gas systems with pressures in excess of 14 inches of water column, the test pressure shall not be less than 1.5 times the operating pressure for the system and shall hold this pressure for a minimum of 30 minutes. [~~The test pressure to be used shall be not less than 1 ½ times the proposed maximum working pressure, but not less than 3 psig (20 kPa gauge), irrespective of design pressure. Where the test pressure exceeds 125 psig (862 kPa gauge), the test pressure shall not exceed a value that produces a hoop stress in the piping greater than 50 percent of the specified minimum yield strength of the pipe.~~]

Section 406.4.2, Test duration, is amended as follows:

406.4.2 Test duration. Test duration shall be held for a length of time satisfactory to the code official, but in no case for less than 15 minutes. For welded piping, and for piping carrying gas at a pressure in excess of 14 inches of water column pressure (3.48 kPa), the test duration shall be held for a length of time satisfactory to the code official, but in no case for less than 30 minutes. [~~not less than ½ hour for each 500 cubic feet (14 m^3) of pipe volume or fraction thereof. When testing a system having a volume less than 10 cubic feet (0.28 m^3) or a system in a single-family dwelling, the test duration shall be not less than 10 minutes.~~] The duration of the test shall not be required to exceed 24 hours.

Section 406.4.3, Test gauges, is added as follows:

406.4.3 Test gauges. Test gauges shall be a grade 1A or better as per ANSI/ASME B40.100-2005.

Section 409.5, Appliance shutoff valve, is amended as follows and by adding the following exception:

409.5 Appliance shutoff valve. Each appliance shall be provided with a shutoff valve in accordance with Section 409.5.1[,] or 409.5.2. [~~or 409.5.3.~~]

Exception: An outdoor appliance shall have a shutoff valve at the piping connection to the gas piping system.

Section 409.5.3, Located at manifold, is repealed in its entirety.

Secs. 10-73—10-80. Reserved.

ARTICLE IX. PLUMBING CODE

Sec. 10-81. Adoption of *International Plumbing Code* (2021).

The 2021 edition of the *International Plumbing Code*, Chapters 2 through 15 and Appendices B through E, promulgated by the International Code Council, 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 10-82. Provisions of this article are in addition to the provisions of the *International Plumbing Code*. The following provisions coinciding with the provisions of the *International Plumbing Code* supersede, repeal, or delete, when indicated, the corresponding provisions of the *International Plumbing Code*.

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

Sec. 10-82. Amendments to the adopted chapters and appendices of the *International Plumbing Code* (2021).

Additions to the *International Plumbing Code* (IPC) are shown as underlined text. Deletions of the IPC are shown as bracketed [~~strikethroughs~~].

Section 202, GENERAL DEFINITIONS, GREASE INTERCEPTOR, Gravity is amended as follows:

Gravity. Plumbing appurtenances of not less than 500 gallons (1893 L) capacity that are installed in the sanitary drainage system to intercept free-floating fats, oils, and grease from wastewater discharge. Separation is accomplished by gravity during a retention time of not less than 30 minutes. The appurtenance shall be a double compartment, first compartment 60% and the second compartment 40% with a minimum 20" manhole access to each compartment unless otherwise approved by the code official.

Section 202, GENERAL DEFINITIONS, is amended by adding the following definitions:

NFPA 70. The National Electrical Code, as amended by Article VI of this Code.

Section 301, GENERAL, is amended by adding Section 301.8, Accessible openings, Section 301.9, Separation from electrical lines in a ditch, and Section 301.10, Support, as follows:

301.8 Accessible openings. When accessible openings are required by this Code, they shall be a minimum of 12 inches x 12 inches (305 mm x 305 mm) in dimension unless otherwise approved by the code official.

301.9 Separation from electrical lines in a ditch. When outside the footprint of the building, no plumbing, gas, sewer, or water piping shall be installed in the same ditch with electric lines unless a separation of 36 inches (914 mm) horizontally is maintained.

301.10 Support. Exterior appliances or equipment supported from the ground shall rest on level concrete or other approved base extending not less than three (3) inches (76 mm) above the adjoining ground level.

Section 305.4.1, Sewer depth, is amended as follows:

305.4.1 Sewer depth. *Building sewers* [~~that connect to private sewage disposal systems~~] shall be installed not less than 12 [~~NUMBER~~] inches (304 mm) below finished grade. [~~at the point of septic tank connection.] [Building sewers shall be installed not less than [Number] inches (mm) below grade.~~]

Section 312.1.1, Test gauges, is amended as follows:

312.1.1 Test Gauges. Gauges used for testing shall be [~~as follows:~~] grade 1A or better as per ANSI/ASME B40.100-2005.

1. Tests requiring a pressure of 10 pounds per square inch (psi) (69 kPa) or less shall utilize a testing gauge having increments of 0.10 psi (0.69 kPa) or less.
2. Tests requiring a pressure of greater than 10 psi (69 kPa) but less than or equal to 100 psi (689 kPa) shall utilize a testing gauge having increments of 1 psi (6.9 kPa) or less.
3. Tests requiring a pressure of greater than 100 psi (689 kPa) shall utilize a testing gauge having increments of 2 psi (14 kPa) or less.

Section 312.2, Drainage and vent water test, is amended as follows:

312.2 Drainage and vent water test. Prior to any concealment, a [~~A~~] water test and subsequent inspection shall be applied to the drainage system either in its entirety or in sections. If applied to the entire system, all openings in the piping shall be tightly closed, except the highest opening, and the system shall be filled with water to the point of overflow. If the system is tested in sections, each opening shall be tightly plugged except the highest opening of the section under test, and each section shall be filled with water, but no section shall be tested with less than a 3.5-foot (1067 mm) [~~10-foot (3048 mm)~~] head of water. In testing successive sections, at least the upper 10 feet (3048 mm) of the next preceding section shall be tested so that no joint or pipe in the building, except the uppermost 10 feet (3048 mm) of the system, shall have been submitted to a test of less than a 3.5-foot (1067 mm) [~~10-foot (3048 mm)~~] head of water. This pressure shall be held for at least 15 minutes. The system shall then be tight at all points. The first-floor underground drain, waste, and vent piping (Rough-In) systems shall be retested to at least slab height and inspected after all backfill is in place and foundation steel installed but prior to placement of concrete. This inspection may also be obtained by retesting the first-floor underground drain; waste and vent piping (Rough-In) system at the Top Out stage to assure there are no broken drains or vent pipes below the concrete slab. The system shall be tested to the overflow level of the Tub, or the next reasonable point on the system as approved by the code official.

Section 312.6, Gravity sewer test, is deleted in its entirety.

[~~312.6 Gravity sewer test. Gravity sewer tests shall consist of plugging the end of the building sewer at the point of connection with the public sewer, filling the building sewer with water, testing with not less than a 10-foot (3048 mm) head of water and maintaining such pressure for 15 minutes.~~]

Section 312.7, Forced sewer test, is deleted in its entirety.

~~[312.7 Forced sewer test. Forced sewer tests shall consist of plugging the end of the building sewer at the point of connection with the public sewer and applying a pressure of 5 psi (34.5 kPa) greater than the pump rating and maintaining such pressure for 15 minutes.]~~

Section [M] 314.2.1, Condensate disposal, is amended with the following text:

[M] 314.2.1 Condensate disposal. Condensate disposal shall be in accordance with Chapter 34, Section 34-274 of the City Code of San Antonio for newly constructed commercial buildings. Existing commercial buildings shall be permitted to follow Chapter 34, Section 34-274 of the City Code of San Antonio for condensate disposal. Primary drain lines located in any unconditioned space, except for crawl spaces, shall be insulated with foam plastic rubber-based insulation or approved material with a minimum thickness of 3/8 inch. Condensate from all cooling coils and evaporators shall be conveyed from the drain pan outlet to an approved place of disposal. Such piping shall maintain a horizontal slope in the direction of discharge of not less than one-eighth unit vertical in 12 units horizontal (1-percent slope). Condensate shall not discharge into a street, alley, or other areas so as to cause a nuisance.

Section [M] 314.2.1.1, Condensate discharge, is amended as follows:

[M] 314.2.1.1 Condensate discharge. Condensate drains shall not directly connect to any plumbing drain, waste, or vent pipe. Condensate drains shall not discharge into a plumbing fixture other than a floor sink, floor drain, trench drain, mop sink, hub drain, standpipe, utility sink or laundry sink. Condensate drain connections to a lavatory wye branch tailpiece or to a bathtub overflow pipe shall not be considered as discharging to a plumbing fixture. Except where ~~[discharging to grade outdoors]~~ installed per Chapter 34, Section 34-274 of the City Code of San Antonio, the point of discharge of condensate drains shall be located within the same occupancy, tenant space or dwelling unit as the source of the condensate.

Section [M] 314.2.4.1, Ductless mini-split system traps, is amended as follows:

[M]314.2.4.1 Ductless mini-split system traps. Ductless mini-split equipment that produces condensate shall be in accordance with their manufacturers' recommendations. ~~[provided with an in-line check valve located in the drain line, or a trap.]~~

Section 401.3, Water conservation, is deleted and replaced with the following text:

401.3 Water conservation. The maximum discharge flow rates for plumbing fixture fittings shall be in accordance with applicable standards referenced in Chapter 15 and listed in Table 604.4, but in no case shall they exceed the maximum requirements of the Texas Commission of Environmental Quality (TCEQ), Chapter 372, titled "Environmental Performance Standards for Plumbing Fixtures" and/or the requirements set forth by these amendments.

Table 403.1, MINIMUM NUMBER OF REQUIRED PLUMBING FIXTURES, note e is deleted in its entirety and replaced with the following text and shall apply to all Classifications in the Table:

e. Service sinks are not required for an occupant load of 15 or fewer or as otherwise approved by the code official.

Section 403.1.1, Fixture calculations, Exception 2 is amended as follows, all other code text remains as is:

Exceptions:

2. Where multiple-user facilities are designed to serve all genders, the minimum fixture count shall be calculated 100 percent, based on total occupant load. In such multiple-user facilities,

each fixture type shall be in accordance with ICC A117.1 and each urinal that is provided shall be [~~located in a stall~~] provided with walls and a door enclosing the fixture.

Section 403.2, Separate facilities, Exception 6 is amended as follows, all other code text remains as is:

Exceptions:

6. Separate facilities shall not be required where rooms having both water closets and lavatory fixtures are designed for use by both sexes and privacy for water closets and urinals is provided [~~in accordance with Section 405.3.4. Urinals shall be located in an area visually separated from the remainder of the facility or each urinal that is provided shall be located in a stall~~] with walls and a door enclosing the fixtures.

Section 404, ACCESSIBLE PLUMBING FACILITIES, is deleted. Refer to TDLR Architectural Barriers Texas Accessibility Standards (TAS) Chapter 6.

Section 405.3.1, Water closets, urinals, lavatories, and bidets, is amended as follows:

405.3.1 Water closets, urinals, lavatories, and bidets. A water closet, urinal, ~~lavatory,~~ or bidet shall not be set closer than 15 inches (381 mm) from its center to any side wall, partition, vanity, or other obstruction. Where partitions or other obstructions do not separate adjacent water closets, urinals, or bidets, the fixtures shall not be set closer than 30 inches (762 mm) center to center between adjacent fixtures or adjacent water closets, urinals, or bidets. There shall be not less than a 21-inch (533 mm) clearance in front of a water closet, urinal, lavatory or bidet to any wall, fixture, or door. Water closet compartments shall be not less than 30 inches (762 mm) in width and not less than 60 inches (1524 mm) in depth for floor-mounted water closets and not less than 30 inches (762 mm) in width and 56 inches (1422 mm) in depth for wall-hung water closets.

Section 410.2, Small occupancies, is amended as follows:

410.2 Small Occupancies. Drinking fountains shall not be required for an occupant load of 30 [~~15~~] or fewer.

Section 410.4, Substitution, is amended as follows:

410. 4 Substitution. Where *buildings* with a use classification of A-2, B (clinics only), E (day care only), I-1, I-2 (Nursing Homes only), R-3 and R-4 as defined in the *International Building Code* [~~restaurants~~] provide drinking water in a container free of charge, drinking fountains shall not be required [~~in those restaurants~~]. In other occupancies, where [~~three or more~~] drinking fountains are required, water dispensers, or water in other containers shall be permitted to be substituted for not more than 50 percent of the required number of drinking fountains.

Section 424.1, Approval, is amended by adding Section 424.1.1, Non-water using urinals, as follows:

424.1.1 Non-Water using urinals. Non-water urinals shall conform to ASME A112.19.2/CSA B 45.1, ASME 112.19.19 or CSA B45.5/IAPMO Z124. Non-water urinals shall provide a trap seal that complies with the International Plumbing Code. Non-water urinals shall permit the uninhibited flow of waste through the urinal to the sanitary drainage system. Non-water urinal installations shall be designed to have an active plumbing fixture drain discharge ahead of the urinal drain by means of a vertical wet vent above the urinal drain tee. Refer to section 912.1.1 Vertical Wet Vent Permitted in the International Plumbing Code. (Texas House Bill 2667 (Legislative Session 81 (R))). In addition, the installation of an appropriately sized water distribution and fixture supply piping must be installed in the wall at a location immediately adjacent to the non-water urinal so that a water supplied urinal may be placed at a future date.

Section 502.3, Water heaters installed in attics, is amended as follows:

502.3 Water heaters installed in attics. Storage type water heaters shall not be installed in an attic unless accessible from a door opening on the same floor level in one-and two-family residential occupancies and townhomes. Attics containing a water heater shall be provided with an opening an unobstructed passageway large enough to allow removal of the water heater. The passageway shall not be less than 30 inches (762 mm) high and 22 inches (559 mm) wide and not more than 20 feet (6096 mm) in length when measured along the centerline of the passageway from the opening to the water heater. The passageway shall have continuous solid flooring not less than 24 inches (610 mm) wide. A level service space at least 30 inches (762 mm) deep and 30 inches (762 mm) wide shall be present at the front or service side of the water heater. The clear access opening dimensions shall be a minimum of 20 inches by 30 inches (508 mm by 762 mm) where such dimensions are large enough to allow removal of the water heater.

Section 502, INSTALLATION, is amended by adding Section 502.6, Water heaters installed under stairways and landings, as follows:

502.6 Water heaters installed under stairways and landings. An electric water heater is the only type of water heater that may be installed under a stairway or landing.

Section 502, INSTALLATION, is amended by adding Section 502.7, Water heaters installed in garages, as follows:

502.7 Electric water heaters installed in garages. Electric water heaters shall be elevated not less than 18 inches (457 mm) above the garage floor.

Section 504.6, Requirements for discharge piping, is amended as follows:

504.6 Requirements for discharge piping. The discharge piping serving a pressure relief valve, temperature relief valve or combination thereof shall:

1. Not be directly connected to the drainage system.
2. Discharge through an air gap located in the same room as the water heater.
3. Not be smaller than the diameter of the outlet of the valve served and shall discharge full size to the air gap.
4. Serve a single relief device and shall not connect to piping serving any other relief device or equipment.
5. Discharge to [~~the floor, to the pan serving the water heater or storage tank, to~~] a waste receptor or to the outdoors. Discharge to the floor of a garage or basement will only be allowed if approved by the *code official.* Terminate to the exterior a minimum of six inches (152 mm) and a maximum of 12 inches (304 mm) above the finish grade.
6. Discharge in a manner that does not cause personal injury or structural damage.
7. Discharge to a termination point that is accessible [~~readily observable by the building occupants~~].
8. Not be trapped.
9. To be installed so as to flow by gravity.
10. Terminate not more than 6 inches (152 mm) above and not less than two times the discharge pipe diameter above the floor or *flood level rim* of the waste receptor.
11. Not have a threaded connection at the end of such piping.
12. Not have valves or tee fittings.
13. Be constructed of those materials listed in Section 605.4 or materials listed, rated, and *approved* for such use in accordance with ASME A112.4.1.

14. Be one nominal size larger than the size of the relief valve outlet, where the relief valve discharge piping is installed with insert fittings. The outlet end of such tubing shall be fastened in place.

15. Union or flex connector on temperature pressure relief valve shall be placed within six inches (1522 mm) of the valve for removal and replacement.

Section 604.4, Maximum flow and water consumption, Exceptions, is amended as follows:

604.4 Maximum flow and water consumption. The maximum water consumption flow rates and quantities for all plumbing fixtures and fixture fittings shall be in accordance with Table 604.4.

***Exceptions*:**

~~[1. Blowout design water closets having a maximum water consumption of 3 ½ gallons (13 L) per flushing cycle.]~~

1. ~~[2.]~~ Vegetable sprays.

2. ~~[3.]~~ Clinical sinks having a maximum water consumption of 4 ½ gallons (17 L) per flushing cycle.

3. ~~[4.]~~ Service sinks.

4. ~~[5.]~~ Emergency showers.

Table 604.4, MAXIMUM FLOW RATES AND CONSUMPTION FOR PLUMBING FIXTURES AND FIXTURE FITTINGS, is amended as follows:

TABLE 604.4
MAXIMUM FLOW RATES AND CONSUMPTION FOR PLUMBING FIXTURES[d] AND FIXTURE FITTINGS

PLUMBING FIXTURE OR FIXTURE FITTING	MAXIMUM FLOW RATE OR QUANTITY[b]
Lavatory, private	1.5 ~~[2.2]~~ gpm at 60 psi
Lavatory, public (metering)	0.25 gallon per metering cycle
Lavatory, public (other than metering)	0.5 gpm at 60 psi
Shower head[a]	2.0 ~~[2.5]~~ gpm at 80 psi
Sink faucet	2.2 gpm at 60 psi
Urinal	0.5 ~~[1.0]~~ gallon per flushing cycle
Water closet	1.28 ~~[1.6]~~ gallons per flushing cycle

For SI: 1 gallon = 3.785 L, 1 gallon per minute = 3.785 L/m.
1 pound per square inch = 6.895 kPa.

a. A hand-held shower spray is a shower head. All associated heads shall be appropriate for the flow rate.

b. Consumption tolerances shall be determined from referenced standards.

c. Where the Environmental Protection Agency has accepted that specific plumbing fixtures, by make and model, meet or exceed WaterSense standards, such fixtures installed will be from the most current listing available at the time of installation.

Section 604.9, Water hammer, is amended as follows:

604.9 Water hammer. The flow velocity of the water distribution system shall be controlled to reduce the possibility of water hammer. A water-hammer arrestor shall be installed where quick-closing valves are utilized. Water-hammer arrestors shall be installed in accordance with the manufacturer's specifications. Water-hammer arrestors shall conform to ASSE 1010. Water-hammer arrestors shall be installed to protect all washing machines, kitchen sinks, dishwashers, tubs, and shower locations from water hammer. A separate tub and shower set back-to-back may be served by a single set of water-hammer arrestors, provided that the continuation of the water line from one fixture (where the arrestors are located) to the other fixture does not exceed 8 linear feet as measured along the pipe.

Table 605.3, WATER SERVICE PIPE, is amended to reflect changes. Unaltered sections of the Table remain in full force:

TABLE 605.3
WATER SERVICE PIPE

MATERIAL	STANDARD
Polyvinyl chloride (PVC) plastic pipe	ASTM D1785; ASTM D2241; ASTM D2672; CSA B137.3 AWWA C900-07

Section 605.3, Water service pipe, is amended to add section 605.3.2, Lead Testing, to read as follows:

605.3.2 Lead Testing. Upon exposure of the waterline/service line from the meter to the home for repair, replacement or inspection, a plumber, or their employee or agent, performing such work shall perform a test on their exposed pipe material and any exposed connectors or solder for the presence of lead, if not already performed. A lead swab test performed on a clean pipe surface area, connector or solder is acceptable to meet the above requirement and shall not require the removal of any section of the pipe. The San Antonio Water System (SAWS) shall provide guidance on acceptable testing methods consistent with TCEQ or EPA guidelines. Photographs of any area of the pipe, connector or solder that is tested as well as the completed swab test must be taken and shall be submitted to SAWS along with information identifying the property and testing location within ten (10) business days of receiving test results. Testing is not required on pipe material that is part of infrastructure, developments or construction that occurred after 2014.

Section 605.23.2, Plastic pipe, or tubing to other piping material, is amended as follows:

605.23.2 Plastic pipe or tubing to other piping material. Joints between different types of plastic pipe or between plastic pipe and other piping material shall be made with an approved adapters or transition fittings. Schedule 40 plastic socket molded (female adapter) fittings are prohibited when connecting to pipe threads.

Section 606.2, Location of shutoff valves, is amended as follows:

606.2 Location of shutoff valves. Shutoff valves shall be installed in the following locations:

1. On the fixture supply at [~~to~~] each fixture other than bathtubs and showers in one-and two-family residential *occupancies*, and other than in individual sleeping units that are provided with unit shutoff valves in hotels, motels, Boarding houses, and similar *occupancies*.

[~~2. On the water supply pipe to each sillcock.~~]

2. [~~3.~~] On the water supply pipe to each appliance or mechanical equipment.

Section 607.3, Thermal expansion control, is amended as follows:

607.3 Thermal expansion control. Where a storage water heater is supplied with cold water that passes through an on-site check valve, pressure reducing valve, or backflow preventer, a thermal expansion tank shall be connected to the water heater cold water supply pipe at a point that is downstream of all check valves, pressure reducing valves and backflow preventers. Thermal expansion tanks shall be sized in accordance to the manufacturer's instructions and sized such that the pressure in the water distribution system shall not exceed that required by section 604.8. Thermal expansion control is limited to the use of expansion tanks (per water conservation requirements of 1998, Ordinance 89128).

Table 608.1, APPLICATION OF BACKFLOW PREVENTERS, is amended to reflect changes. Unaltered sections of the Table remain in full force:

TABLE 608.1 APPLICATION OF BACKFLOW PREVENTERS

DEVICE	DEGREE OF HAZARD	APPLICATION	APPLICABLE STANDARDS
Backflow preventer for carbonated beverage machines	Low hazard	Backpressure or backsiphonage Sizes ¼"-3/8"	ASSE [~~1022~~] 1015

608.14.10 More than one assembly. Where more than one (1) backflow preventer is installed on a single premise, and the backflow preventers are installed in one location, each separate backflow preventer shall be permanently marked in an approved manner to identify the location of the system that the backflow preventer serves.

Section 608.15, Location of backflow preventers, is amended by adding Section 608.15.3, Access, and Section 608.15.4, Identification, as follows:

608.15.3 Access. All backflow preventers shall be readily accessible.

608.15.4 Identification. All backflow preventers that have been insulated per 608.15.2, resulting in the preventer's identification plate being covered, shall have a weatherproof tag permanently affixed to the outside of the insulation that identifies the make, model, and serial number of the backflow preventer.

Section 608.17.1.1, Carbonated beverage dispensers, is amended as follows:

608.17.1.1 Carbonated beverage dispensers. The water supply connection to each carbonated beverage dispenser shall be protected against backflow by a backflow preventer conforming to ASSE 1015 [~~1022~~] or by an *air gap*. The portion of the backflow preventer device downstream from the

second check valve of the device and the piping downstream therefrom shall not be affected by carbon dioxide gas.

Section 608.17.2, Connections to boilers, is amended as follows:

608.17.2 Connections to non-potable boilers. The potable supply to the boiler shall be equipped with a backflow preventer with an intermediate atmospheric vent complying with ASSE 1013. [~~1012, ASSE 1081 CSA B64.3.~~] Where conditioning chemicals are introduced into the system, the potable water connection shall be protected by an air gap or a reduced pressure principle backflow preventer, complying with ASSE 1013, CSA B64.4 or AWWA C511.

Section 608.17.5, Connections to lawn irrigation systems, is amended as follows:

608.17.5 Connections to lawn irrigation systems. The potable water supply to lawn irrigation systems shall be protected against backflow by [~~an atmospheric-type vacuum breaker,~~] a pressure vacuum breaker assembly, a double-check valve assembly or a reduced pressure principle backflow prevention assembly. [~~Valves shall not be installed downstream from an atmospheric vacuum breaker.~~] Where chemicals are introduced into the system or there is an on-site sewage facility (OSSF) system, the potable water supply shall be protected against backflow by a reduced pressure principle backflow prevention assembly. The irrigation system shall be designed and installed in accordance with City Ordinance #100322 and #2008-08-07-0653.

Section 702.3, Building sewer pipe, is amended as follows:

702.3 Building sewer pipe. Though not required, building sewer pipes three inch and four inches are recommended to be a minimum of Schedule 40 PVC or SDR26. Though not required, sewer lines six inch and larger are recommended to be a minimum of SDR 35 PVC. Cast-iron and Stainless steel 316L may also be used for all sizes. Polyethylene (PE) plastic pipe (SDR-PR) ASTM F 714 may be used for replacement of underground sewers by pipe-bursting methods in Section 717. Building sewer pipe shall conform to one of the standards listed in Table 702.3.

Section 705.1, General, is amended by adding section 705.1.1, Joint couplings, as follows:

705.1.1 Joint Couplings. All underground or under slab mechanical joint coupling installations shall be shielded and Wide-Bodied.

Section 708.1.8, Manholes, is amended as follows:

708.1.8 Manholes. Manholes and manhole covers shall be of an *approved* type. Manhole covers located inside a building shall have gas-tight covers that require tools for removal. Manhole covers shall be identified as "SEWER" and shall not indicate a utility company thereon.

Section 708.1, Cleanouts required, is amended by adding section 708.1.13, Individual fixture, as follows:

708.1.13 Individual fixture. All washing machines and kitchen sinks shall have an accessible clean out.

Section 717.4, Permitting, is repealed in its entirety.

Section 717.8, Post-installation recorded video camera survey, is amended as follows.

717.8 Post-installation recorded video camera survey. The completed, relined piping system shall be inspected internally by a recorded video camera survey after the system has been flushed and flow-tested with water. The video survey shall be reviewed by a licensed engineer [~~submitted to the code official~~] prior to finalization of the permit. The video survey shall be reviewed and evaluated to provide verification that no defects exist. Any defects identified shall be repaired and replaced in accordance with this code.

Section 717.9, Certification, is amended as follows.

717.9 Certification. A certification shall be provided in writing to the code official, from a licensed engineer [~~the permit holder~~], that the relining materials have been installed in accordance with the manufacturer's installation instructions, the applicable standards, and this code.

Section 802.4, Waste Receptors, is amended by adding an exception as follows:

802.4 Waste Receptors.

***Exception*:** Waste receptors may be installed in a plenum. The trap shall be deep seal type and shall be protected by one of the methods in sections 1002.4.1.1 thru 1002.4.1.4.

Section 903.1.1, Roof extension unprotected, is amended as follows:

903.1.1 Roof extension unprotected. Open vent pipes that extend through a roof shall be terminated [~~not less than~~] at least 6 [~~NUMBER~~] inches (152 mm) above the roof.

Section 905.4, Vertical rise of vent, is amended as follows:

905.4 Vertical rise of vent. Every dry vent shall rise vertically to a point not less than 6 inches (152 mm) above the *flood level rim* of the highest trap or trapped fixture being vented. When structural conditions require horizontal vents to be installed below the flood level rim of the fixture they serve, they shall have a cleanout installed on the riser in an accessible location.

***Exception*:** Vents for interceptors located outdoors.

Section 915.2.3, Connection, is amended as follows:

915.2.3 Connection. The combination waste and vent system shall have a minimum of two vents, one at the start of the system and one at the end of the system before the last fixture [~~be provided with a dry vent connected at any point within the system or the system shall connect to a horizontal drain that is vented in accordance with one of the venting methods described in this chapter serves vented fixtures located on the same floor~~]. *Combination waste and vent systems* connecting to building drains receiving only the discharge from a one or more stack or stacks shall be provided with a dry vent. The vent connection to the combination waste and vent pipe shall extend vertically to a point not less than 6 inches (152 mm) above the flood level rim of the highest fixture being vented before offsetting horizontally. The horizontal length of a combination waste and vent system shall be unlimited.

Section 917.1, Where permitted, is amended by adding section 917.1.1, Engineering certification, as follows:

917.1.1 Engineering certification. Single stack vent systems are considered to be an alternative engineering design system and shall be installed in strict accordance with the engineered design. Upon completion of this alternative design system, the design engineer shall submit a letter of the inspection of the systems compliance with the alternative design. The compliance letter shall be signed, sealed, and dated, by the design engineer. Signage shall be permanently placed on site identifying the plumbing system as an alternative engineering design Single Stack Vent System and any alterations to the system shall be reviewed by an engineer.

Section 1003.2, Approval, is amended as follows:

1003.2 Approval. The size, type and location of each interceptor shall be designed and installed in accordance with the manufacturer's instructions and the requirements of this section based on the anticipated conditions of use. Wastes that do not require treatment or separation shall not be discharged into any interceptor or separator. All interceptors shall be stamped or labeled by the manufacturer with an indication of its size in gallons or its full discharge rate in gallons per minute

(gpm). The full discharge rate to such an interceptor shall be determined at full flow. Each interceptor shall be rated equal to or greater than the incoming flow.

Section 1003.3.2, Food waste disposers restriction, is amended as follows:

1003.3.2 Food waste disposers restriction. ~~[A food waste disposer shall not discharge to a grease interceptor.]~~ Where food waste disposers connect to grease interceptors, a solids interceptor shall separate the discharge before connecting to the grease interceptor. Solids interceptors and grease interceptors shall be sized and rated for the discharge of the food waste disposer. Emulsifiers, chemicals, enzymes, and bacteria shall not discharge into the food waste disposers.

SECTION 1004, MATERIALS, JOINTS, AND CONNECTIONS, is amended by adding Section 1004.2, Sample well, as follows:

1004.2 Sample well. An effluent sampling well for all interceptors shall be required. For new construction, the sample well shall have a riser a minimum of 6 inches (153 mm) in diameter and shall be installed after the confluence of all wasted streams from the facility and prior to discharging into the *sanitary sewer* collection system. The well shall be perpendicular to the effluent lateral to allow observation of the flow stream and provide for sampling of wastewater. For remodeling of an existing structure requiring installation of an interceptor, the option to use an existing 4-inch (102 mm) diameter sample well may be permitted in lieu of a 6-inch (153 mm) sample well.

SECTION 1202, MEDICAL GASES, is amended by adding Section 1202.2, Medical gases not regulated by NFPA 99, as follows:

1202.2 Medical gases not regulated by NFPA 99. Where medical gases are installed in other than human medical care facilities such as, but not limited to, veterinary clinics, educational, instructional, and training facilities, etc, the installation shall comply with the minimum standards of the International Plumbing Code such as, but not limited to, the piping materials, support, testing, etc. The piping systems shall be appropriately labeled with the contents every 20 feet.

Section 1301.9.4, Makeup water, is amended as follows:

1301.9.4 Makeup water. Where an uninterrupted supply is required for the intended application, potable or reclaimed water shall be provided as a source of make-up water for the storage tank. The makeup water supply shall be protected against backflow in accordance with section 608. A full-open valve located on the makeup water supply line to the storage tank shall be provided. Inlets to the storage tank shall be controlled by fill valves or other automatic supply valves installed to prevent the tank form overflowing and to prevent the water level from dropping below a predetermined point. Where makeup water is provided, the water level shall not be permitted to drop below the water source water inlet or the intake of any attached pump. Where non-potable systems are supplied with makeup water form a potable source, the potable makeup shall be protected by both an air gap and a RP backflow device in accordance with Section 608.

Sec. 10-83. Fee schedule.

Plumbing, Gas, Sewer	
Plumbing License and Registration Fees	
Annual Irrigation Contractor Registration Fee	$85.00

Plumbing, Gas, Sewer Permit Fees	
Plumbing Inspection (Basic Fee)	$50.00
Fixture; Roof Drain; Reverse Osmosis, Fire Sprinkler Head (per unit)	$7.00
Grease Trap; Oil Separator; Sand Trap; Lint Trap; Neutralization Tank (or tank receiving discharge of liquid waste from fixtures); Drain, Appurtenance; Appliance	
0—500 gallons	$12.00
>500 gallons	$17.00
Water Heater, Vent (Gas/electric)	$8.00
Back-flow Prevention Device	
1/4" - ¾"	$15.00
1"	$20.00
1 ¼"	$45.00
1 ½"	$55.00
2"+	$75.00
Water Softener	$17.00
Underground Waterline	
0—100ft	$10.00
101—250ft	$15.00
251—500ft	$25.00
501—1000ft	$45.00
1001—2000ft	$75.00
2001—3000ft	$100.00
Over 3001ft (plus additional $25 for each 200ft or part thereof over 3001ft)	$125.00
Irrigation System Inspection Fee	$50.00
Residential Landscape Irrigation System Permit Fee	$50.00
Commercial Landscape Irrigation System Permit Fee	$100.00
Gas Inspection (Basic Fee)	$50.00
1—5 openings (fee for each of the first five opening)	$10.00
>5 openings (fee for each opening over five)	$3.00

Gas Test; Extension (with 1 opening); Replace Gas Line; Split Meter; Move Meter; Butane Conversion (each)	$8.00
Sewer Inspection (Basic Fee)	$50.00
0—60 ft.	$10.00
61—150 ft	$20.00
151—300 ft	$35.00
301—500 ft.	$50.00
501—750 ft.	$70.00
751—1,000 ft.	$110.00
>1,000 ft. (plus $20.00 for each 150ft or part thereof over 1000ft	$125.00
Reclaim Water Line Openings Inspection	$50.00
1—4 openings (flat fee)	$40.00
>4 openings (fee for each opening over four)	$5.00
Medical Gas Inspection (Basic Fee) (oxygen - O_2; nitrous oxide - N_2O; medical compress air - MedAir Nitrogen - N_2; vacuum - Vac; carbon dioxide - CO_2; helium - He)	$50.00
1—5 openings (flat fee)	$13.00
>5 openings (fee for each opening over five)	$3.00
Building-related and Fire Codes Appeals and Advisory Board Fees	
Building-related and Fire Codes Appeal Fee	$155.00
Special Services for Plumbing	
After-hour Inspection Fee (per hour with 1 hour minimum)	$100.00
Inspection for which no fee is specifically indicated (per hour with 1 hour minimum)	$100.00
Permit Refund Fee	$50.00
Permit Amendment Fee	$10.00
Inspection Schedule Fee (Free on-line)	$3.00
Re-inspection Fee	$51.50
Permit Processing Fee	$10.00
Completion permit fee	50% of permit (plus cost of permit)

Plumbing Plan Review only (without building plan number)—Per hour/1 hour minimum	$100.00
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.)	

Secs. 10-84—10-90. Reserved.

ARTICLE X. ENERGY CONSERVATION CODE

The city council approves and adopts the recommendations of the mayor's sustainable task force:

The city supports the adoption and implementation of energy provisions that result in energy savings of 15% or greater than the currently adopted code in 2008 (IECC 2000 with 2001 supplement and ASHRAE 90.1 1999), the goal of 30% energy savings in 2012 over the currently adopted code in 2008 (IECC 2000 with 2001 supplement and ASHRAE 90.1 1999), the goal of net-zero carbon by 2030 with the intent to provide flexibility to permit the use of innovative approaches and techniques to achieve the effective use of energy and to reduce greenhouse gas and ozone precursor emissions in the city and which is not intended to abridge safety, health, or environmental requirements contained in other applicable codes or ordinances.

The city approves the goals of the following recommendations of the sustainable building task force:

(1) *That the development services department, office of public utilities within finance, and the office of sustainability coordinate with CPS Energy and San Antonio Water System (SAWS) to evaluate a new construction residential and commercial financial incentive program to include the provision of specific rebates or other incentives, with an ultimate goal of achieving net zero carbon by 2030 and be designed to reward improved performance in a scaled fashion, within the current limitations of all applicable laws and regulations.*

(2) *That CPS Energy and SAWS provide existing rebate and incentive information to the city to coordinate and promote incentives to provide one-stop information.*

(3) *That the office of sustainability provide information on sustainable building practices and incentives to encourage residential and commercial developers to exceed minimum code requirements and serve as a clearinghouse for green building information from a wide and ever-increasing variety of sources.*

(4) *That the city office of sustainability coordinate education awareness with other agencies or organizations that include workshops, trainings, and seminars which will provide sustainable building practices for residential and commercial buildings that exceed minimum code requirements.*

(5) *That the city office of sustainability promote an annual San Antonio Green Leadership awards program to recognize all new residential and commercial builders, architects, and others that significantly exceed the minimum code and to post those names on the city's website and through additional public media outlets.*

(6) *That CPS Energy and SAWS evaluate incentives and rebates to support energy and water conservation for programs that exceeds code and include such programs in a unified city-wide promotion.*

(7) That energy incentives be provided to achieve 30% or greater savings above the currently adopted energy code; and

(8) That the Building-Related and Fire Codes Appeals and Advisory Board (BRFCAAB) review the city's current energy code as needed but not less often than every three years and recommend changes to make periodic progress toward the goal of net-zero carbon by 2030.

(13) That the city office of sustainability would monitor the implementation of the recommendations of the mayor's task force on sustainable buildings, review COSA sustainability energy policies and goals, and measure periodic progress toward the goal of net-zero carbon by 2030.

(14) That the city office of sustainability would recommend the establishment or modification of interim goals to attain agreed long-term goals and make recommendations to city management, City Council, and the BRFCAAB as needed but not less often than every three years. Interim and long-term goals would be evaluated and recommended for amendment as required on the basis of sustainable environmental and community benefits, return on investment and practical impact on the regulated community.

Sec. 10-91. Adoption of *International Energy Conservation Code* (2021).

The 2021 edition of the *International Energy Conservation Code*, promulgated by the International Code Council, Chapters 2[CE] through 5[CE], Chapters 2[RE] through 5[RE] and both the commercial and residential Chapters 6 (referenced standards), 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 10-92. Provisions of this article are in addition to the provisions of the *International Energy Conservation Code*. The following provisions coinciding with the provisions of *the International Energy Conservation Code* supersede, repeal, or delete, when indicated, the corresponding provisions of the *International Energy Conservation Code*.

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

Sec. 10-92. Amendments to the adopted chapters of the *International Energy Conservation Code* (2021).

Additions to the *International Energy Conservation Code* (IECC) are shown as underlined text. Deletions of the IECC are shown as bracketed [~~strikethroughs~~].

Section C402.3, Roof solar reflectance and thermal emittance, is amended to read as follows (exceptions are unchanged):

C402.3 Roof solar reflectance and thermal emittance. Low-sloped roofs, with a slope less than or equal to 2 units vertical per 12 units horizontal, directly above cooled conditioned spaces in *Climate Zones 0 through 3* shall comply with one or more of the options in Table C402.3. Roof surfaces with a slope greater than 2 units vertical per 12 units horizontal, directly above cooled conditioned spaces shall have a minimum reflectance of 0.35 or a minimum Solar Reflective Index of 29.

Section C402.4.2, Minimum skylight fenestration area, Exception is amended by adding a sixth exception as follows. All other language in Section C402.4.2 remains:

***Exception*:** Skylights above *daylight zones* of enclosed spaces are not required in:

1. Buildings in *Climate Zones* 6 through 8.
2. Spaces where the designed *general lighting power* densities are less than 0.5 W/ft^2 (5.4 W/m^2).

3. Areas where it is documented that existing structures or natural objects block direct beam sunlight on not less than half of the roof over the enclosed area for more than 1,500 daytime hours per year between 8 a.m. and 4 p.m.
4. Spaces where the *daylight zone* under rooftop monitors is greater than 50 percent of the enclosed space floor area.
5. Spaces where the total area minus the area of sidelit *daylight zones* is less than 2,500 square feet (232 m^2), and where the lighting is controlled in accordance with Section C405.2.3.
6. Spaces designed as storm shelters complying with ICC 500.
7. In warehouses protected by Early Suppression Fast Response (ESFR) fire sprinklers where vertical wall fenestration is provided with a minimum areas equal to that determined by Section C402.4.2.

Section C404.6.1, Circulation systems, is amended to read as follows:

C404.6.1 Circulation systems. Heated-water circulation systems shall be provided with a circulation pump. The system return pipe shall be a dedicated return pipe or a cold-water supply pipe. Gravity and thermo-syphon circulation systems shall be prohibited. Controls for circulating hot water system pumps shall automatically turn off the pump when the water in circulation loop is at the desired temperature and when there is not a demand for hot water. The controls shall limit the temperature of the water entering the cold-water piping to not greater than 104°F (40°C) and shall comply with one of the following:

1. Controls for circulating hot water system pumps shall start the pump based on the identification of a demand for hot water within the occupancy. The controls shall automatically turn off the pump when the water in the circulation loop is at the desired temperature and when there is not a demand for hot water.
2. Controls for circulating hot water system pumps shall include a timer clock switch operating pumps based on time of day/night. Controls shall also include a return water temperature sensor switch to pause the re-circulating pump whenever the return water is hot.

Section C405.6, Dwelling electrical meter, is modified to read as follows:

C405.6 Dwelling electrical meter. Each dwelling unit located in a Group R-2 multi-family building shall have a separate electrical meter.

Section C405.12, Energy monitoring, is modified to read as follows with remaining text to remain as written:

C405.12 Energy monitoring. New buildings with a gross conditioned floor area of [~~25,000~~] 100,000 square feet or larger shall be equipped to measure, monitor, record and report energy consumption data in compliance with Sections C405.12.1 through C405.12.5

Exception: R-2 occupancies and individual tenant spaces in other occupancies are not required to comply with this section provided that the space has its own utility services ad meters and has less than [~~5,000~~] 10,000 square feet of conditioned floor area.

SECTION C409, ELECTRIC VEHICLE (EV) CAPABLE, and Section C409.1, Electric vehicle power supply, and Section C409.2, Number of parking spaces, are added as follows:

SECTION C409
ELECTRIC VEHICLE (EV) CAPABLE

This section applies to all buildings not included in SECTION R410.

C409.1 Electric vehicle power supply. The main electrical service panel shall have the capacity to support the required number of spaces detailed in C409.2. The property owner will designate which branch panel(s) will be utilized for future EV charging. The designated branch panel(s) shall reserve the space and capacity to support one future 40-ampere breaker for every 2 spaces required. The designated breaker spaces may be located in multiple branch panels as long as the total number space and capacity is met. The reserved space(s) in the designated branch panel(s) shall be labeled "For Future EV". The Director may increase the number of spaces per 40-ampere breaker or lower the breaker's ampere size as smart charging technology is developed.

C409.2 Number of parking spaces. The reserved capacity shall be capable to support 5% of the total required parking spaces.

Section C501.5, Historic buildings, is amended to read as follows:

C501.5 Historic buildings. Provisions of this code relating to the construction, *repair, alteration*, restoration, and movement of structures, and *change of occupancy* shall not be mandatory for *historic buildings*. [~~provided a report has been submitted to the code official and signed by a registered design professional or a representative of the State Historic Preservation Office or the historic preservation authority having jurisdiction, demonstrating that compliance with that provision would threaten, degrade, or destroy the historic form, fabric, or function of the building.~~]

Section C503.2.1, Roof replacement, is amended to read as follows:

C503.2.1 Roof replacement. *Roof replacements* shall comply with Section C402.1.3, C402.1.4, C402.1.5 or C407 where the existing roof assembly is part of the *building thermal envelope* and contains insulation entirely above the roof deck. In no case shall the *R*-value of the roof insulation re reduced or the *U*-Factor of the roof assembly be increased as part of the *roof replacement*. New skylights are not required to be provided as part of a roof replacement where the existing building did not have skylights. Where new skylights are installed at the option of the owner as part of the roof replacement, they shall meet Section C503.2.3.

Table R402.1.3, INSULATION MINIMUM R-VALUES AND FENESTRATION REQUIREMENTS BY COMPONENT, is amended as follows with all other text in the table to remain as is:

Climate Zone	Fenestration U-Factor	Skylight U-Factor	Glazed Fenestration SHGC	Ceiling R-Value	Wood Frame Wall R-Value	Mass Wall R-Value	Floor R-Value	Basement Wall R-Value	Slab R-Value & Depth	Crawl Space Wall R-Value
2	0.40	0.65	0.25	[~~49~~] 38	13 or 0&10 ci	4/6	13	0	0	0

Section R402.4.1.1, Installation, is amended to read as follows:

R402.4.1.1 Installation. The components of the *building thermal envelope* as listed in Table R402.4.1.1 shall be installed in accordance with the manufacturer's instructions and the criteria indicated in Table R402.4.1.1, as applicable to the method of construction. [~~Where required by the code official, an~~] An approved third party shall inspect all components and verify compliance. Insulation letters shall not be submitted to the *Building Official* prior to the inspection being performed and shall be submitted on a form approved by the *Building Official.*

Section R402.4.1.2, Testing, is amended by amending the first paragraph to read as follows. All other language in Section R402.4.1.2 remains:

R402.4.1.2 Testing. The *building* or dwelling unit shall be tested for air leakage. The maximum air leakage rate for any *building or dwelling unit* under any compliance path shall not exceed 5.0 air changes per hour or 0.28 cubic feet per minute (CFM) per square foot [$0.0079 m^3/(s \times m^2)$] of dwelling unit enclosure area. Testing shall be conducted in accordance with ANSI/RESNET/ICC 380, ASTM E 779 or ASTM E 1827 and reported at a pressure of 0.2-inch w.g. (50 Pascals). [~~Where required by the code official, testing~~] Testing shall be conducted by an *approved* third party. A written report of the results of the test shall be signed by the party conducting the test and provided to the *Building Official* [~~code official~~]. Testing shall be performed at any time after creation of all penetrations of the *building thermal envelope* have been sealed.

Section R402.4.6, Electrical and communication outlet boxes (air-sealed boxes), is amended as follows.

R402.4.6 Electrical and communication outlet boxes (air-sealed boxes). Electrical and communication outlet boxes installed in the building thermal envelope shall be sealed to limit air leakage between conditioned and unconditioned spaces [~~. Electrical and communication~~] or outlet boxes shall be tested in accordance with NEMA OS 4, *Requirements for Air-Sealed Boxes for Electrical and Communication Applications* and shall have an air leakage rate of not greater than 2.0 cubic feet per minute (0.944 L/s) at a pressure differential of 1.57 psf (75 Pa). Electrical and communication outlet boxes shall be marked "NEMA OS 4" or "OS 4" in accordance with NEMA OS 4. Electrical and communication outlet boxes shall be installed per the manufacturer's instructions and with any supplied components required to achieve compliance with NEMA OS 4.

Section R402.6, Radiant Barrier, is added to read as follows:

R402.6 Radiant Barrier. In new dwellings, a roof radiant barrier with an emittance of 0.10 or less as tested in accordance with ASTM C-1371 or ASTM E-408 is required above conditioned spaces. The radiant barrier shall be installed according to the manufacturer's instructions.

***Exceptions*:**

1. Roofs covered with materials that have a solar reflectance of 0.4 or greater.
2. Residential buildings with sealed attics such as foam type insulation or similar.
3. Residential buildings with all mechanical equipment and all ductwork located wholly within the conditioned space.

R403.3.1, Ducts located outside conditioned space, is amended by adding an exception as follows.

R403.3.1 Ducts located outside conditioned space. Supply and return ducts located outside conditioned space shall be insulated to an *R*-value of not less than R-8 for ducts 3 inches (76 mm) in diameter and larger and not less than R-6 for ducts smaller than 3 inches (76 mm) in diameter. Ducts buried beneath a building shall be insulated as required per this section or have an equivalent thermal distribution efficiency. Underground ducts utilizing the thermal distribution efficiency method shall be listed and labeled to indicate the R-value equivalency.

***Exception*:**

1. Supply and return ducts in attics shall be insulated to an R-value of not less than R-6 for ducts 3 inches (76 mm) in diameter and larger, where the efficiency of the installed cooling equipment is higher than the minimum required by federal law for climate zone 2.

Section R403.5.1.1, Circulation systems, is amended to read as follows:

R403.5.1.1 Circulation systems. Heated water circulation systems shall be provided with a circulation pump. The system return pipe shall be a dedicated return pipe or a cold-water supply pipe. Gravity and thermosyphon circulation systems shall be prohibited. Controls for circulating hot water system pumps shall automatically turn off the pump when the water in the circulation loop is at the desired temperature and when there is no demand for hot water. The controls shall limit the temperature of the water entering the cold-water piping to not greater than 104°F (40°C) and shall comply with one of the following:

1. Controls for circulating hot water system pumps shall start the pump based on the identification of a demand for hot water within the occupancy. The controls shall automatically turn off the pump when the water in the circulation loop is at the desired temperature and when there is no demand for hot water.
2. Controls for circulating hot water system pumps shall include a timer clock switch operating pumps based on time of day/night. Controls shall also include a return water temperature sensor switch to pause the re-circulating pump whenever the return water is hot.

Section R403.6.3, Testing, is repealed in its entirety.

Section R404, ELECTRICAL POWER AND LIGHTING SYSTEMS, is repealed in its entirety.

Table R406.5, Maximum energy Rating Index, is amended as follows:

TABLE R406.5
MAXIMUM ENERGY RATING INDEX

CLIMATE ZONE	ENERGY RATING INDEX
0-1	52
2	59 [~~52~~]

3	51
4	54
5	55
6	54
7	53
8	53

SECTION R409, PHOTOVOLTAIC (PV) CAPABLE, and Section R409.1, Electrical service reserved space, are added as follows:

SECTION R409
PHOTOVOLTAIC (PV) CAPABLE

This section applies to detached one- and two- family dwellings and townhouses three stories or less in height above grade plane.

R409.1 Electrical service reserve space. The main electrical service panel shall have a reserved space to allow installation of a dual pole circuit breaker for future solar electric installation and shall be labeled "For Future Solar Electric." The reserved space shall be positioned at the opposite (load) end from the input feeder location or main circuit location.

SECTION R410, ELECTRIC VEHICLE (EV) READY, and Section R410.1, Electric vehicle ready, are added as follows:

SECTION R410
ELECTRIC VEHICLE (EV) READY

This section applies to detached one- and two- family dwellings and townhouses three stories or less in height above grade plane.

R410.1 Electric vehicle ready. One- and two- family dwellings, townhouses three stories or less with a garage shall have a dedicated 40amp/240volt single receptacle for EV use.

Exception: Properties without a garage.

Section R501.6, Historic buildings, is amended to read as follows:

R501.6 Historic buildings. Provisions of this code relating to the construction, *repair, alteration,* restoration, and movement of structures, and change of occupancy shall not be mandatory for *historic buildings.* [~~provided that a report has been submitted to the code official and signed by the owner, a registered design professional, or a representative of the State Historic Preservation Office or the historic preservation authority having jurisdiction, demonstrating that compliance with that provision would threaten, degrade, or destroy the historic form, fabric, or function of the building.~~]

Secs. 10-93—10-95 Reserved.

ARTICLE XI. SWIMMING POOL AND SPA CODE

Section 10-96. Adoption of *International Pool and Spa Code 2021*

The 2021 edition of the *International Pool and Spa Code*, promulgated by the International Code Council, 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 10-94. Provisions of this article are in addition to the provisions of the *International Pool and Spa Code*. The following provisions coinciding with the provisions of the *International Pool and Spa Code* supersede, repeal, or delete, when indicated, the corresponding provisions of the *International Pool and Spa Code*.

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

Section 10-97. Amendments to the adopted chapters of the *International Swimming Pool and Spa Code 2021.*

Additions to the *International Swimming Pool and Spa Code (ISPSC)* are shown as underlined text. Deletions to the ISPSC are shown as bracketed [~~strikethroughs~~].

Section 102.9, Other laws, is amended to read as follows:

Section 102.9 Other laws. The provisions of this code shall not be deemed to nullify any provisions of local, state, or federal law, nor shall any conflicts with state law this code supersede any state law, to include but not limited to;

1. Texas Department of State Health Services (TDSHS); Standards for Public Pools and Spas; 2~~8~~65. 181 through § 2~~8~~65.20~~8~~11, (TDSHS rules do not apply to pools located on one- and two-family dwellings or townhouses lots).

2. Texas Department of Licensing and Regulation (TDLR); 2012 Texas Accessibility Standards (TAS), TAS provide the scoping and technical requirements for accessibility for Swimming Pool, wading pools and spas and shall comply with 2012 TAS, Section 242. TAS rules do not apply to pools serving one- and two-family dwellings or townhouses).

3. City of San Antonio City Code Section 34-273(11), *Pool construction requirements on or after May 1, 2013.*

4. Texas Health and Safety Code; Title 9. Safety, Subtitle A. Public Safety, Chapter 757. Pool Yard Enclosures.

***Exception*:** Elements regulated under Texas Department of Licensing and Regulation TDLR) and built-in accordance with TDLR approved plans, including any variances or waivers granted by the TDLR, shall be deemed to be in compliance with the requirements of this Chapter.

PART 2- ADMINISTRATION AND ENFORCEMENT, including Sections 103, 104, 105, 106 107, 108, 109, 110, 111, 112, 113, and 114, is deleted in its entirety.

Section 202 Definitions is amended by adding the definition for the San Antonio Metropolitan Health District.

> **SAN ANTONIO METROPOLITAN HEALTH DISTRICT** regulates the operation of public pools. Routine inspections on pools and spas open to the public are conducted to document compliance with the standards set forth in State Law.

Section 302.4, Concealed piping inspection, is amended as follows:

> **302.4 Concealed piping inspection.** Piping, including process piping, that is installed in trenches, shall be [~~inspected~~] tested at 25 psi for 15 min prior to backfilling.

SECTION 305, BARRIER REQUIREMENTS, is amended by amending 305.1, General, and 305.1.1, Construction fencing required and 305.2, Outdoor swimming pools and spas, to read as follows:

> **Section 305.1 General.** The provisions of this section shall apply to the design of barriers for restricting entry into areas having pools and spas. In one -and two-family dwellings and townhouses, 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 305.2 through 305.7.
>
> **305.1.1 Construction fencing required.** The construction sites for in-ground swimming pools and spas shall be provided with fencing to surround the site from the time that any excavation occurs to the time that the permanent barrier is completed. The [~~fencing~~] barrier shall be not less than [~~4~~] 3 feet ([~~1219~~] 914 mm) in height.
>
> **305.2 Outdoor swimming pools and spas.** Outdoor pools and spas and indoor swimming pools shall be surrounded by a barrier that complies with Sections 305.2.1 through 305.7 and in accordance with the Texas Administrative Code, Texas Health, and Safety Code 757 for public pools.

Section 305.2.7, Chain link dimensions, is amended by adding Section 305.2.7.1, Chain link fencing prohibited, as follows:

> **Section 305.2.7.1 Chain link fencing prohibited.** Chain link fencing is not permitted as a barrier in public pools built after January 1, 1994.

Section 305.4, Structure wall as a barrier, is amended as follows with all other code text to remain as written:

> **Section 305.4 Structure wall as a barrier.** Where a wall [~~of a dwelling or structure~~] of a one- and two-family dwelling or townhouse or its accessory structure serves as part of a barrier and where doors, gates or windows provide direct access to the pool or spa through that wall, one of the following shall be required:

The wall of a building with windows in accordance with 2021 International Building Code, Section 1031 in Group R2 occupancies shall not be used as part of pool enclosure. Other windows that are part of a pool yard enclosure shall be permanently closed and unable to be opened for public pools.

Section 305.6, Natural barriers, is amended by amending the title as follows with all other code text to remain as written:

Section 305.6 Natural barriers used in a one- and two-family dwelling or townhouse.

Section 307.1.4, Accessibility, is amended to add the Exception to read as follows:

Section 307.1.4 Accessibility. An accessible route to public pools and spas shall be provided in accordance with the International Building Code. Accessibility within public pools and spas shall be provided as required by the accessible recreational facilities provisions of the International Building Code. Pool and spa lifts providing an accessible means of entry into the water shall be listed and labeled in accordance with UL 60335-2-1000 and be installed in accordance with ICC A117.1 and NFPA 70.

***Exception*:** Components of projects regulated by and registered with Architectural Barriers Division of Texas Department of Licensing and Regulation shall be deemed to be in compliance with the requirements of this chapter.

Section 310.1, General, is amended by adding the following:

Section 310.1 General. Suction entrapment avoidance for pools and spas shall be provided in accordance with APSP 7 (ANSI/PHTA/ICC7) or for public swimming pools in accordance with State of Texas Rules for Public Swimming Pools and Spas, Title 25 TAC Chapter 265 Subchapter L, Rule §265.190.

Section 320.1, Backwash water or draining water, is amended as follows:

Section 320.1 Backwash water or draining water. For public pools, backwash water [~~and draining water~~] shall be discharged to the sanitary [~~or storm~~] sewer, or into an *approved* disposal system on the premise, or shall be disposed of by other means approved by the state or local authority. Direct connections shall not be made between the end of the backwash line and the disposal system. Drains shall discharge through an air gap.

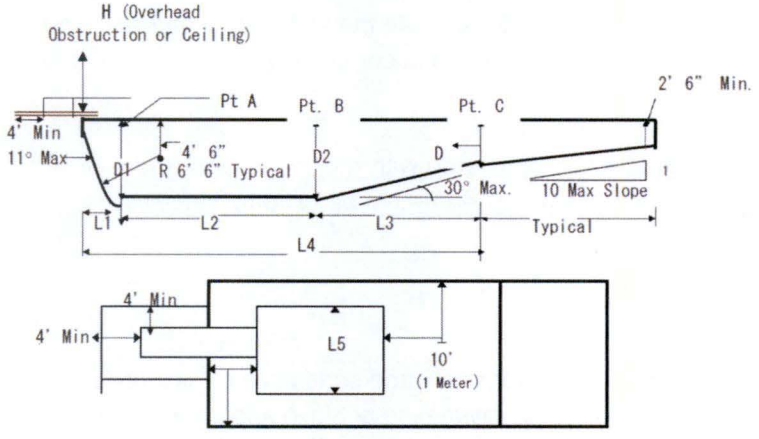
Section 402.12, Water envelopes, is amended to delete Table 402.12 and Figure 402.12, add Figure 25 TAC 265.186(e)(6) and to read as follows:

Section 402.12 Water envelopes. The minimum diving water envelopes shall be in accordance with [~~Table 402.12~~] Texas Department of State Health Services, Administrative Code Title 25, Chapter 265, Section186 (e) and Figure: 25 TAC 256.186 (e) (6).

Add Figure 25 TAC 265.186(e)(6):

ADD: Figure: 25 TAC §265.186 (e) (6)

Maximum Diving Board Height Over Water	¾ Meter	1 Meter	3 Meters
Max. Diving Board Length	12 ft.	16 ft.	16 ft.
Minimum Diving Board Overhang	2 ft. 6 in.	5 ft.	5 ft.
D1 Minimum	8 ft. 6 in.	11 ft. 2 in.	12 ft. 2 in.
D2 Minimum	9 ft.	10 ft. 10 in.	11 ft. 10 in.
D3 Minimum	4 ft.	6 ft.	6 ft.
L1 Minimum	4 ft.	5 ft.	5 ft.
L2 Minimum	12 ft.	16 ft. 5 in.	19 ft. 9 in.
L3 Minimum	14 ft. 10 in.	13 ft. 2 in.	13 ft. 11in.
L4 Minimum	30 ft. 10 in.	34 ft. 7 in.	38 ft. 8 in.
L5 Minimum	8 ft.	10 ft.	13 ft.
H Minimum	16 ft.	16 ft.	16 ft.
From Plummet to Pool Wall at Side	9 ft.	10 ft.	11 ft. 6 in.
From Plummet to Adjacent Plummet	10 ft.	10 ft.	10 ft.



Section 402.13, Ladders for diving equipment, is amended to remove the Exception as follows:

402.13 Ladders for diving equipment. Ladders shall be provided with two grab rails or two handrails. There shall be a uniform distance between ladder treads, with a 7-inch (178 mm) minimum distance and 12-inch (305 mm) maximum distance. Supports, platforms, steps, and ladders for diving equipment shall be designed to carry the anticipated loads. Steps and ladders shall be of corrosion-resistant material, easily cleanable and with slip-resistant tread.

~~Exception: The distance between treads for the top and bottom riser can vary but shall be not less than 7 inches (178 mm) and not greater than 12 inches (305 MM).~~

Section 411.2.1, Tread dimensions and area, is amended as follows:

Section 411.2.1 Tread dimensions and area. Treads shall have a minimum unobstructed horizontal depth (i.e., horizontal run) of 12 inches and a minimum width of 20 inches. [~~not be less than 24 inches (607mm) at the leading edge. Treads shall have an unobstructed surface area of not less than 240 square inches (154838mm2) and an unobstructed horizontal depth of not less than10 inches (254 mm) at the center line.~~]

Section 411.2.2, Risers, is amended as follows:

Section 411.2.2 Risers. Risers for steps shall have a maximum uniform height of 10 inches, with the bottom riser height allowed to taper to zero. [~~except for the bottom riser, shall have a uniform height of not greater than 12 inches (305 mm) measured at the center line. The bottom riser height is allowed to vary to the floor~~.]

Section 411.5.1, Swimouts, is amended by adding the following text to item 4 as follows:

Section 411.5.1 Swimouts. Swimouts, located in either the deep or shallow area of a pool, shall comply with all of the following:

4. The leading edge shall be visibly set apart and provided with a horizontal solid or broken stripe at least 1 inch wide on the top surface along the front leading edge of each step. This stripe shall be plainly visible to persons on the pool deck. The stripe shall be a contrasting color to the background on which it is applied, and the color shall be permanent in nature and shall be a slip-resistant surface.

Section 411.5.2, Underwater seats, and benches, is amended by adding the following text to item 5 as follows:

Section 411.5.2 Underwater seats and benches. Underwater seats and benches, whether used alone or in conjunction with pool stairs, shall comply with all of the following:

5. The leading edge shall be visibly set apart and provided with a horizontal solid or broken stripe at least 1 inch wide on the top surface along the front leading edge of each step. This stripe shall be plainly visible to persons on the pool deck. The stripe shall be a contrasting color to the background on which it is applied, and the color shall be permanent in nature and shall be a slip-resistant surface.

Section 412, Signage, is to be repealed in its entirety and replaced with Texas Department of State Health Services (TDSHS); Standards for Public Pools and Spas, 265. 181 through § 265.211 requirements for signage

SECTION 603, MARKINGS, AND INDICATORS, is amended by repealing Section 603.2, Class D-2 pools, and replacing with 603.2, Class A and B pools, as follows:

Section 603.2 Class A and B pools. Class A and B pools over 5 feet deep: the transition point of the pool from the shallow area to the deep area of the pool shall be visually set apart with a 4-inch minimum width row of floor tile, a painted line, or similar means using a color contrasting with the bottom; and a rope and float line shall be provided between 1 foot and 2 feet on the shallow side of the 5-foot depth along and parallel to this depth from one side of the pool to the other side. The floats shall be spaced at not greater than 7-foot intervals; and the floats shall be secured so they will not slide or bunch up. The stretched float line shall be of sufficient size and strength to offer a good handhold and support loads normally imposed by users. If the owner or operator of the pool knows or should have known in the exercise of ordinary care that a rope or float is missing, broken, or defective, the problem shall be promptly remedied.

Section 609.9, Infant care, is amended to read as follows:

609.9 Infant Care. Baby-changing tables shall be provided in toilet facilities [~~having two or more water closets~~].

Section 610.5.1, Uniform height of 9 inches, is amended to read as follows:

Section 610.5.1 Uniform height of [~~9~~]10 inches. Except for the bottom riser, risers at the centerline shall have a maximum uniform height of [~~9~~] 10 inches ([~~229~~] 254 mm). The bottom riser height shall be permitted to vary from the other risers.

Section 804.1, General, is amended as follows:

Section 804.1 General. The minimum diving water envelopes shall be in accordance with Table 804.1 and Figure 804.1, or the manufacturer's specifications, whichever is greater. Negative construction tolerances shall not be applied to the dimensions of the minimum diving water envelopes given in Table 804.1.

Secs. 10-98—10-100. Reserved.

ARTICLE XII. FIRE PREVENTION

Sec. 10-101. Fire prevention.

See Chapter 11 of this Code.

Secs. 10-102—10-110. Reserved.

ARTICLE XIII. LICENSING AND REGISTRATION

Sec. 10-111. Billboard operator license.

(a) License required. All persons engaging in the business of erecting, painting, servicing or maintaining billboards or any other off-premises advertising sign shall, for the purposes of this chapter, be considered billboard operators and must be licensed to do business per Chapters 10-111 and 10-116. A license holder supplying his license for a firm or corporation doing business under this chapter shall not supply his license to a second firm or corporation. Any permit issued to the license holder shall be for work being done by the license holder and his firm or corporation. The licensing requirement shall not be applicable to employees or subcontractors performing work under the supervision of the licensed billboard operator.

(b) Examination required, application. Before a billboard operator license may be issued, each person seeking such a license shall take an examination and file an application for the examination with the *Building Official.*

(c) Qualifications. Prior to taking the examination required by this chapter, each applicant shall demonstrate to the *Building Official* an ability to read and write English and show proof of at least four (4) years practical experience at the trade working under a billboard operator. The applicant shall also submit to the *Building Official* an affidavit, duly sworn, setting forth his experience. Proof of the applicant's experience shall be included with the affidavit.

(d) Examination fee; test score; issuance of license. Examinations are administered by an approved third party, and the associated examination fees are paid directly to the approved third party by the applicant. After the *Building Official* has approved the application, the applicant has passed the required examination, and the applicant has paid the license fee in accordance with the city approved fee schedule, the *Building Official* shall issue the applicant a billboard operator license.

Sec. 10-112. Commercial sign operator license.

(a) License required. Any person engaged in the business of erecting, painting, maintaining, or servicing commercial signs must be licensed as a commercial sign operator by the city per Chapters 10-112 and 10-116.

(b) Examination required, application. Before a billboard operator's license may be issued, each person seeking such a license shall take an examination and file an application for the examination with the *Building Official*.

(c) Qualifications. Prior to taking the examination required by this chapter, each applicant shall demonstrate to the *Building Official* an ability to read and write English, and show proof of at least two (2) years of experience in commercial sign installation working under a licensed commercial sign operator, or a licensed commercial sign operator from another city provided that the licensing qualifications and examinations are similar in design and quality to that of the city as determined by the *Building Official*, or can show proof of at least four (4) years of experience in commercial sign installation, provided the verification of experience shall be provided to the *Building Official* in a manner established by written policy. The applicant shall also submit to the *Building Official* an affidavit, duly sworn, setting forth his experience. Proof of the applicant's experience shall be included with the affidavit.

(d) Examination fee; test score; issuance of license. Examinations are administered by an approved third party, and the associated examination fees are paid directly to the approved third party by the applicant. After the *Building Official* has approved the application, the applicant has passed the 2018 International Building-Related Codes required examination, and the applicant has paid the license fee in accordance with the city approved fee schedule, the *Building Official* shall issue the applicant a commercial sign operator license.

Sec. 10-113. City electrical contractors and electrical sign contractors, installers, maintenance electricians; licenses and registrations.

(a) Effect of state licensing. Upon the state's enforcement of House Bill 1487, passed by the 78th session of the Texas Legislature that established the state licensing of electricians, the city no longer licenses electricians through testing administered by the city.

> ***Exception*:** The *Building Official* will continue to renew those electrical licenses issued prior to the state's electrical license program. All provisions and regulations of this chapter shall apply to licenses issued by the city and/or the state.

(b) State licensed electrical contractors and electrical sign contractors, registration. State licensed electrical contractors and electrical sign contractors shall register with the city before performing any electrical work or electrical sign work regulated by this chapter, chapter 10-116 and/or chapter 28, Signs, and billboards.

(c) General liability and completed operation insurance.

(1) A licensed contractor shall furnish the name of the insurance carrier, policy number, name, address, and telephone number of the insurance agent with whom the contractor is insured to the *Building Official* or to any customer who requests it. An electrical contractor, electrical sign contractor, or the holder of an annual electrical maintenance permit must continuously maintain on file with the *Building Official* in a form of a certificate addressed to the city showing the above referenced persons carrying the following types and amounts of insurance:

a. The insurance must be at least $300,000 per occurrence (combines for property damage and bodily injury

1. Be at least $600,000 aggregate (total amount the policy will pay for property damage and bodily injury coverage); and

2. Be at least $300,000 aggregate for products and completed operations.

b. The holder of any contractor's license is responsible for providing evidence of a new or renewal policy of any required insurance coverage upon termination or renewal of any policy.

c. Any insurance certificate required by this Code must be written through a company licensed to issue the insurance in the state and the insurance may be approved by office of the city attorney.

(d) City classifications of licenses and registrations. The following are the classifications of City licenses and registrations regulated by this Code:

(1) Licenses:

a. Electrical contractor.
b. Electrical sign contractor.
c. Master electrician.
d. Master sign electrician.
e. Journeyman electrician.

(2) Registrations:

a. Electrical maintenance technician.

(e) City licenses, registration cards and certificates.

(1) A registration card, bearing the *Building Official*'s signature, shall be issued to each person receiving a city registration or license.

(2) Each such registration card shall expire at midnight of the renewal date. A new card shall be issued provided that the registration or license holder has complied with the regulations of this Code pertaining to renewals.

(3) Each registration certificate or card, when issued to an electrical contractor, electrical sign contractor shall be issued to a person and registered in the name of the firm by which the person is employed. The firm shall be known as the holder of such registration certificate or card and shall notify the code official if the licensee is no longer in its employment. No further permits will be issued to the firm based upon the previous license holder's name who is no longer employed by the firm.

(4) It shall be a violation of this Code for any person to alter or amend in any manner, lend, rent, or transfer a registration certificate or card, and for any person to make use of any such rights for which the person is not registered or licensed.

(5) Each electrical contractor, electrical sign contractor, or residential appliance installation contractor shall display the registration certificate in a conspicuous place in the firm's place of business. Each holder of a registration card shall carry the registration card on his person at all times while performing electrical work, electrical sign work or residential appliance installation covered by this Code and shall present it to the *Building Official* upon demand.

(f) License expiration, renewal, and continuing education. A license may be renewed at any time within thirty (30) days before the expiration date, unless such license has been revoked or canceled by the *Building Official*. Applicants shall show proof of having satisfactorily completed an accredited four-hour code study course, approved by the *Building Official*, for each year of renewal within the twenty-four (24) months immediately preceding such renewal. All electrical and sign licenses shall expire at midnight on the anniversary date of their issuance and shall be subject to renewal for a two-year period of time.

(g) License prerequisite to issuance of permit. A permit for electrical work or electrical sign work shall not be issued to any person unless such person is the holder of a license to perform the class of work described in such permit as provided in this chapter. An annual electrical maintenance permit required by this chapter shall not be issued unless the owner of the property provides evidence that the maintenance work will be performed by individuals qualified in accordance with subsection 10-6(c) of this chapter.

(h) Electrical contractors, electrical sign contractors; responsibilities.

(1) Every electrical or electrical sign contractor, before engaging in electrical or electrical sign work, must procure a master electrician or master electrician sign license for the conduct of such work. Electrical work is regulated by this Code. Electrical sign work is regulated by chapter 28, Signs, and billboards.

a. Electrical contractor work shall not include the manufacture of any sign regulated by this Code or chapter 28.

b. Electrical sign contractor work shall not include the extensions of, or additions to, an existing branch circuit.

(2) A licensed contractor shall display its name and license number on both sides of each vehicle owned or operated by the business and used in the conduct of his work. Lettering shall be of a contrasting color and at least two (2) inches in height.

a. An electrical contractor's license number shall be preceded by the letters "EM" or "TECL" depending on whether the business is operating under a local license or state license.

b. An electrical sign contractor's license number shall be preceded by the letters "SM" "TSCL" for city licenses or state licenses respectively.

(3) All of a contractor's non-exempt work shall be performed by licensed or registered individuals. A contractor is responsible for compliance with applicable codes for all such work performed on its behalf.

(4) The licensed contractor's name, address, phone number, and license number shall appear on all proposals, invoices, and written contracts proposed by the contractor. The following information: "Regulated by The Texas Department of Licensing and Regulation, P. O. Box 12157, Austin, Texas 78711, 1-800-803-9202, 512-463-6599; website: www.tdlr.texas.gov shall be listed on all proposals, invoices, and written contracts.

(5) A licensed contractor shall maintain employee records and records of all work performed on its behalf for a period of four (4) years after completion of the work and shall make those records available to the code official at the contractor's place of business during normal business hours for inspection and copying.

(6) A licensed contractor and its designated master electrician are responsible for supervision of all licensees or registered persons performing work on behalf of the contractor to assure compliance with applicable statutes and rules and, in particular, standards of conduct set out in these rules.

(i) Master electrician and master sign electrician.

(1) Responsibility. The master electrician of record shall be liable and responsible for the layout and technical supervision of any work that requires the securing of a permit under the master's license. Failure of the master to properly provide for the supervision and control of work being performed on behalf of the business may cause the work being performed under permit to be discontinued by the *Building Official.*

(2) Limitation on multiple business affiliations. Any master electrician or master sign electrician affiliated with a business as herein provided shall not engage in the operation of a second electrical or electrical sign business, under the provisions of this Code, unless it is under the same name and insurance of the first business. Any permit issued to a business must be for work being done by that business. Any master electrician or master sign electrician obtaining permits for any person, business or entity will be notified to appear before the *Building Official* for consideration of a complaint.

(j) Journeyman electrician, journeyman sign electrician, and Residential Wireman; performance of work; supervision and ratio. A journeyman electrician shall perform electrical or electrical sign work under the general supervision of a master electrician or master sign electrician on behalf of an electrical or electrical sign contractor. A residential wireman shall perform electrical work only as defined by Section 10-25 under the general supervision of a master electrician. A journeyman electrician or journeyman sign electrician shall directly

supervise the work of an electrical apprentice provided that a ratio of eight (8) electrical apprentices to one journeyman electrician is not exceeded. A Residential Wireman shall directly supervise the work of an electrical apprentice provided that a ration of four (4) electrical apprentices to one residential wireman is not exceeded, only for work defined in section 10-25.

(k) Electrical maintenance technician; performance of work. A maintenance electrician may perform all of the work under the annual electrical maintenance permit permitted by subsection 10-6(c). A registered electrical maintenance technician may perform all of the work permitted by subsection 10-6(c) but may not perform work involving voltages or amperages that exceed the limits described in subsections 10-6(c)(2) a.—f.

Sec. 10-114. City mechanical licenses.

(a) Licensing and Registration. Along with chapter 10-116, any person performing any form of mechanical work in the city shall have in his possession a valid and authenticated mechanical license issued by the *Building Official* or a valid mechanical license issued by the state, except as otherwise provided under subsection 10-114(g) or as exempted under federal or state law. The city no longer licenses mechanical contractors through testing administered by the city.

Exception: The *Building Official* will continue to renew those mechanical licenses based on completing continued education program.

(b) General liability insurance.

(1) A city mechanical licensed contractor shall furnish the name of the insurance carrier, policy number, name, address, and telephone number of the insurance agent with whom the contractor is insured to the *Building Official* and to any customer who requests it.

(2) City licensed mechanical contractors must continuously maintain on file with the *Building Official* in a form of a certificate addressed to the city showing the above referenced persons carrying the following types and amounts of insurance

a. The insurance must be at least $300,000 per occurrence (combined for property damage and bodily injury);
b. be at least $600,000 aggregate (total amount the policy will pay for property damage and bodily injury coverage); and
c. be at least $300,000 aggregate for products and completed operations.

(3) The holder of any city contractor's license is responsible for providing evidence of a new or renewal policy of any required insurance coverage upon termination or renewal of any policy.

(4) Any insurance certificate required by this Code must be written through a company licensed to issue the insurance in the state and the insurance may be approved by office of the city attorney.

(5) Insurance amount requirements for State issued Air Conditioning and Refrigeration Licenses class A or B of any endorsement shall be regulated by the Texas Department of Licensing and Regulation (TDLR) section 75.40 of the Administrative Rules

(c) City classifications of licenses and registrations. The following are the classifications of city licenses and registrations regulated by this Code. Any person whose license was destroyed or lost may obtain a duplicate license upon payment of the fee set forth in the fee schedule adopted by the city.

(1) Licenses:

a. Master mechanical contractor license
b. Journeymen mechanical license

(d) City license cards.

(1) A registration card, bearing the *Building Official*'s signature, shall be issued to each person receiving a city registration or license.

(2) All city licenses shall expire on December 31 of each year. Licenses shall be renewed prior to the expiration date. Each person holding a valid mechanical license shall renew same in sufficient time to have the license renewal form returned to the Development Services Department with the appropriate renewal fee prior to license expiration date. Any person who does not renew his license prior to expiration date has the right to appeal to the Building-Related and Fire Codes Appeals and Advisory Board.

(3) Each card, when issued to a mechanical contractor, shall be issued to a person, and registered in the name of the firm by which the person is employed. The firm shall be known as the holder of such registration certificate or card and shall notify the code official if the licensee is no longer in its employment. No further permits will be issued to the firm based upon the previous license holder's name who is no longer employed by the firm.

(4) It shall be a violation of this Code for any person to alter or amend in any manner, lend, rent, or transfer a registration certificate or card, and for any person to make use of any such rights for which the person is not registered or licensed.

(5) Each holder of a city issued card shall carry the registration card on his person at all times while performing mechanical work covered by this Code and shall present it to the *Building Official* upon demand.

(e) Continuing Education requirements for mechanical contractors, license expiration, and renewal. A license may be renewed at any time within thirty (30) days before the expiration date, unless such license has been revoked or canceled by the *Building Official*. Applicants shall show proof of having satisfactorily completed the required continuing education as follows:

(1) Mechanical contractors licensed by the state must maintain the required amount of continuing education mandated by state law in order to perform work in the city.

(2) Mechanical contractors licensed by the city will be required to attend eight (8) hours of continuing education annually.

a. This training is mandatory for maintenance of city license.
b. Training curriculum will be established by the *Building Official*, will be in accordance with state law and will be reviewed by the board annually.
c. Annual training will be conducted by the Development Services Department.
d. A licensee may not receive continuing education credit for attending the same course more than once.
e. A fee, established by ordinance in the Development Services Department fee schedule, shall be paid by the licensee for each course.

(f) Certain acts prohibited. In addition to other provisions of this Code, it shall be unlawful for any person to do any of the following acts:

(1) To display, cause or permit to be displayed or to have in one's possession any instrument purporting to be licensed for the doing of any mechanical work, knowing such instrument to be fictitious or to have canceled, revoked suspended or altered;

(2) To lend or knowingly permit the use of any license for the doing of any mechanical work to any person not entitled thereto, under the provisions of this chapter;

(3) To display or represent as one's own a license for the doing of any mechanical work when such license has not been lawfully issued to the person so displaying the same;

(4) To fail or refuse to surrender to the *Building Official* on demand any license for the doing of any mechanical work, which has been suspended, canceled or revoked as provided for in this chapter;

(5) To apply for or have in one's possession more than one current license of the same type provided for in this chapter;

(6) To use a false or fictitious name or give a false or fictitious address in any application for any license provided for in this chapter, or any renewal or duplicate thereof, or knowingly

make a false statement or knowingly conceal a material fact or otherwise commit fraud in making any such application;

(7) To employ as a master or technician in mechanical work any person not licensed as provided in this chapter;

(8) To perform any character of mechanical work for which a license is required by this chapter while such license is suspended, canceled or revoked.

(g) Master mechanical contractor limitations on multiple business affiliations.
Any master mechanical contractor affiliated with a business as herein provided shall not engage in the operation of a second mechanical contracting business, under the provisions of this Code, unless it is under the same name and insurance of the first business. Any permit issued to a business must be for work being done by that business. Any master mechanical contractor obtaining permits for any person, business or entity will be notified to appear before the *Building Official* for consideration of a complaint.

(h) Journeymen mechanical; performance of work; supervision and ratio.
A mechanical journeymen shall perform mechanical work under the general supervision of a master mechanical contractor. A journeymen shall directly supervise the work of a mechanical apprentice provided that a ratio of eight (8) apprentices to one journeyman is not exceeded.

(i) Development Services Inspection Supervisor.
The mechanical inspections supervisor of the Development Services Department shall also serve as the master of record for mechanical work performed by City employed mechanical workers.

Sec. 10-115. Residential Building and Home Improvement contractor registrations.

(a) Registration. Any person performing any form of residential construction or home improvement work in the city shall be working under a contractor registered per Chapters 10-115 and 10-116 with a valid and authenticated home builder registration card issued by the *Building Official* in their possession.

***Exceptions*:**

(1) Any person who will own, occupy, or rent a detached single-family dwelling for a period of twelve (12) months after completion of the building permit and final inspection for the single-family dwelling or accessory building thereto.

(2) Building trade subcontractors who are performing work for the residential building contractor are not required to be registered under this section (e.g., framing subcontractor, flooring subcontractor, drywall subcontractor, painting subcontractor, etc.).

(3) Any person who will repair, replace, or modify non-structural building components to an existing residential detached accessory structure not exceeding 300 square feet.

(b) General liability and insurance.

(1) A registered contractor shall furnish and present the name of the insurance carrier, policy number, name, address, and telephone number of the insurance agent with whom the contractor is insured to the *Building Official* or to any customer upon request.

(2) City registered homebuilder contractors must maintain insurance of the following types and amounts:

a. i
b. be at least $1,000,000 aggregate (total amount the policy will pay for property damage and bodily injury coverage);
c. be at least $500,000 aggregate for products and completed operations; and
d. The City of San Antonio must be listed as Certificate Holder on the Certificate of Liability insurance.

(3) City registered home improvement contractors must maintain insurance of the following types and amounts:

a. The insurance must be at least $300,000 per occurrence (combined for property damage and bodily injury);
b. be at least $600,000 aggregate (total amount the policy will pay for property damage and bodily injury coverage);
c. be at least $300,000 aggregate for products and completed operations; and
d. The City of San Antonio must be listed as Certificate Holder on the Certificate of Liability insurance.

(4) The holder of any city contractor's registration is responsible for providing evidence of a new or renewal policy of any required insurance coverage upon termination or renewal of any policy.

(5) Any insurance certificate required by this Code must be written through a company licensed to issue the insurance in the state and the insurance may be approved by office of the city attorney.

(c) Responsibilities. A registered residential building contractor shall be responsible for exercising such supervision and control of his operations as is necessary to secure full compliance with the provisions of the adopted International Residential Code (IRC) and other applicable laws of the city, state, and United States.

(d) Penalties. A violation of this section shall constitute a Class C misdemeanor offense with a fine not to exceed five hundred dollars ($500.00) per violation. Each day or portion thereof out of compliance with the registration requirements set above shall constitute a separate offense.

(e) Application procedures; requirements.

(1) An applicant for an original registration or renewal must submit an application to the *Building Official* on a form established by the department. Each applicant must fully disclose in the application whether the applicant has:

a. Entered a plea of guilty or nolo contendre (no contest) to:
    1. Any felony charge, or
    2. A misdemeanor involving moral turpitude;
b. Been convicted of:
    1. A felony, or
    2. A misdemeanor involving moral turpitude and the time for appeal has elapsed or the conviction has been affirmed on appeal;
c. Entered a plea of guilty or nolo contendre (no contest) or been convicted of:
    1. Any felony, or
    2. Misdemeanor arising out of a violation of the building code or local amendments thereto in the state whether or not said violation involves moral turpitude;
d. Lost or is suspended from residential building contractor privileges in any jurisdiction in the state. A failure to disclose under subsection 10-115(e)(1) shall be sufficient grounds to deny the application.

(2) The *Building Official* shall have the right to investigate and examine the qualifications and fitness of an applicant.

a. Upon receipt of an application, the *Building Official* shall conduct a criminal background check on the applicant or any person responsible for the application. The applicant will submit to the *Building Official* an officially sealed criminal history record information maintained by the department of Federal Bureau of Investigation or other methods as approved by *Building Official.*
b. For Home Builder registrations only, one agent affiliated with the contractor must obtain a Residential ICC Certification or other certifications approved by the Building Official; or the company has a minimum of 5 years of continued registration with no violations per section 10-115(j), suspensions, or revocation. A new or renewed registration issued before January 1, 2024, that does not meet

either of these requirements will be under probation. The probation will be lifted once requirements are met or the registration canceled on January 1, 2024.

(3) A person may not be issued a registration unless the person:

a. Is at least eighteen (18) years of age; and

b. Is a United States citizen or a lawfully admitted alien; and

c. The *Building Official* is satisfied with the person's honesty, integrity, and trustworthiness based on information supplied and discovered in connection with the application.

Commentary: Full disclosure includes an interest in, or ownership of any entity engaged in the residential building contractor business that has lost or been suspended from residential building constructor privileges.

(f) Duties and powers of *Building Official*.

(1) There is hereby vested in the *Building Official* the duty of examining the applications for contractor registrations, including the issuance, reissuance, renewal, suspension, or cancellation of such registration.

(2) The *Building Official* shall establish procedures consistent with this Code for the issuance of registrations for residential contractors.

(3) The *Building Official* shall have the duty to keep all registration application records. The *Building Official* shall further have the power and duty to adopt, amend, or repeal rules and regulations consistent with the provisions of this section as may be necessary for the proper administration and enforcement hereof.

(g) Appealing a denial of registration.

(1) If either an original or renewal registration is denied, the *Building Official* shall furnish the applicant a written statement setting forth the grounds for the refusal within ten (10) working days. Such statement shall be by certified mail, return receipt requested, to the mailing address provided in the application unless the applicant is present to receive and acknowledge in writing receipt of such letter. The applicant or their representative shall then have fifteen (15) working days from receipt of notice to appeal the *Building Official*'s decision in accordance with section 10-14 of this chapter.

(2) Nothing in this section shall be interpreted as to deny a subsequent application at the expiration of one year from denial of initial registration.

(h) Fees; registration period. The application fee for contractor registration shall be as set forth in this section.

(1) A Home Builder Registration fee of one hundred seventy dollars ($170.00) is required and said registration shall be valid for a period of two (2) years. The registration holder shall be required to re-register every two-year period of time and pay a fee of one hundred seventy dollars ($170.00) for each two-year period of time to maintain registration.

(2) A Home Improvement Registration fee of one hundred fifty dollars ($150.00) is required and said registration shall be valid for a period of two (2) years. The registration holder shall be required to re-register every two-year period of time and pay a fee of one hundred fifty dollars ($150.00) for each two-year period of time to maintain registration.

(i) Contractor limitations on multiple business affiliations. Any contractor affiliated with a business as herein provided shall not engage in the operation of a second contracting business, under the provisions of this Code, unless it is under the same name and insurance of the first business. Any permit issued to a business must be for work being done by that business. Any contractor obtaining permits for any person, business or entity will be notified to appear before the *Building Official* for consideration of a complaint.

Sec. 10-116. City Registration, and insurance required

(a) Application procedures; requirements.

(1) An applicant for an original registration or renewal must submit an application to the *Building Official* on a form established by the department.

(2) The *Building Official* shall have the right to investigate and examine the qualifications and fitness of an applicant.

(b) City registration cards.

(1) A registration card, bearing the *Building Official*'s signature, shall be issued to each person receiving a city registration.

(2) Registrations shall be renewed prior to the expiration date. Each person holding a valid registration shall renew same in sufficient time to have the renewal form returned to the Development Services Department with the appropriate renewal fee prior the expiration date. All city registrations shall expire two (2) years after issuance. Registrations shall be renewed prior to expiration date. Each person holding a valid registration shall renew same in sufficient time to have the renewal form and insurance information returned to the department with the appropriate renewal fee prior to registration expiration date.

(3) Each registration card, when issued to a contractor, shall be issued to a person, and registered in the name of the firm by which the person is employed. The firm shall be known as the holder of such registration and shall notify the code official if the registration holder is no longer in its employment. No further permits will be issued to the firm based upon the previous registration holder's name who is no longer employed by the firm.

(4) It shall be a violation of this Code for any person to alter or amend in any manner, lend, rent, or transfer a registration card, and for any person to make use of any such rights for which the person is not registered.

(5) Each holder of a city issued registration card shall carry the registration card on his person at all times while performing construction work covered by this Code and shall present it to the *Building Official* upon demand.

(c) Registrations or City Licenses not transferable. No registration, or City license shall be transferred, and no holder of any registration shall allow his name or registration to be used by any other person, either for the purpose of performing construction work or obtaining a permit under the penalty of forfeiture of registration and payment of fines

(d) Continuation of the business upon death, disability, or termination of the business's master. Upon the death, disability or termination of a registered contractor, such business will be allowed to complete existing work for which permits had been obtained prior to the severance of such registered holder provided insurance is posted, if applicable, and sufficient evidence is submitted to and approved by the *Building Official* as to the ability of the business to complete the work in accordance with the requirements of this chapter. Monthly approval may be granted by the *Building Official* for a period not to exceed six (6) months. On or before the expiration of such period the business shall associate a registered contractor of the appropriate classification or cease operations.

(e) Qualifications of contractors. It shall be a violation of this chapter for a person who does not hold a license to engage in electrical, mechanical, plumbing, home builder, home improvement, demolition, house mover, billboard operator, commercial sign operator and/or electrical sign construction for which a permit is required, or to undertake to execute such construction or to cause the undertaking of such construction.

(f) Documentation. The *Building Official* shall adopt rules regarding the form of documentation that will be accepted as proof of compliance with any experience, verification of registration status, or other pertinent information the *Building Official* feels is relevant for inclusion.

(g) Record of issuance. The *Building Official* shall maintain a record that is available to the general public of all registrations issued pursuant to this chapter.

(h) Misrepresentation. It shall be a violation of this chapter for any person to represent themselves with any class of license or registration set forth in this Code or to use the words "electrical contractor," "master electrician," "master sign electrician," "electrician," "mechanical contractor", "master mechanical contractor", "master HVAC contractor", "master plumber", "responsible master plumber", "building contractor", "homebuilder", homebuilder contractor, "home improvement contractor " or words of similar import or meaning on signs, business cards, stationery, or by any other manner whatsoever, unless such person is properly registered/licensed within the meaning of the word used as provided in this chapter.

(i) Change of name. Upon payment of the fee set by ordinance, posting of any necessary bonds and compliance with any other requirements of this chapter, the holder of a valid license may apply to the *Building Official* for a change on the name of a registration or license.

(j) Communication, ready access, and vehicle identification.

(1) Means of communication. Every registered contractor must maintain a bona fide company address and telephone number to enable the *Building Official* to contact the contractor in case of a job discrepancy. Any person holding a registration and doing work in the city shall report to the *Building Official* any change of address and telephone number in order to allow the *Building Official* to maintain accurate registration records. Acceptable means for receiving communications include, but are not limited to, a person available at the place of business, an answering machine, voice mail, a pager, or a cellular telephone.

(2) Registered Contractor present for business. The registered contractors are responsible for the general on the job or off the job oversight, direction and management of work and individuals performing work related to the registration type to fulfill the contractors responsibility to the client or employer. Registered contractors shall be present during construction related to that type of registration. "Present" shall mean: on site, in the office, or available to be reached during the times of 7:45 a.m. and 4:30 p.m. Central Standard time. Upon request of the *Building Official*, registered contractors shall make themselves available to meet on the job site.

(3) Vehicle identification. Any contractor engaged in erecting, installing, servicing, or maintaining a billboard or any person engaged in mechanical, electrical, plumbing or building construction shall ensure that all vehicles required to be on the job are identified with the contractor/company name, city registration number or state license number if applicable. For contractors operating with local license numbers, the number should be prefixed with "EM", "SM" or "HM" and those operating with state licenses shall have the TECL, TSCL or shall have the appropriately identified with the prefixes designated by the State (TDLR). Lettering on the vehicle shall be at least two (2) inches high and shall be in full view and legible at all times.

(k) Cancellation and suspension of City licenses and registration; appeals.
Any license or registration granted under this chapter may be canceled, revoked, or suspended by the *Building Official* if the holder of such license or registration violates provisions of this chapter or any ordinance of the city relating to electrical work.

(1) A contractor's certificate of registration or City license may be cancelled or suspended by the *Building Official* after a hearing before the *Building Official* if the registered contractor is convicted of any penal offense arising out of or related to the performance of a

registered contract or the registered contractor suffers a judgment against them in a civil action predicated upon fraud in connection with the performance of a registered contract.

(2) The *Building Official* may also administratively cancel or suspend a certificate of registration or City license after a hearing before the *Building Official* for any one or more of the following reasons:

a. Conviction or entering a plea of guilty or nolo contendre (no contest) by the registered person or entity of:
   i. A felony, or
   ii. Misdemeanor involving moral turpitude;

b. Conviction or entering a plea of guilty or nolo contendre (no contest) in connection with a violation of any adopted technical construction code or amendments thereto in the state;

c. Making any false statement as to a material matter in an application for registration, renewal or hearing in connection with same;

d. Three (3) separate violations of this chapter, provided the violations occur within the previous 12-month period;

e. Upon judicial determination of an abandonment or willful failure to perform any billboard operator, commercial sign operator, mechanical, electrical, plumbing or building contract or project in or undertaken by a registered contractor, or willful deviation from or disregard of plans or specifications in any material respect;

f. Upon judicial determination that the contractor knowingly made substantial misrepresentation on the part of the registered contractor in the procurement of a contract;

g. Upon judicial determination of fraud on the part of the registered contractor in the execution of or in the material alteration of any registered contract or mortgage promissory note or other document relating to the contract;

h. Upon judicial determination that the registered contractor knowingly prepared or accepted any mortgage, promissory note or other evidence of indebtedness pertaining to a billboard, commercial sign, mechanical, electrical, plumbing, or building transaction with knowledge that it recited a greater monetary obligation than the agreed consideration for the construction work;

i. With knowledge, the billboard, commercial sign, mechanical, electrical, plumbing, or building contractor directly or indirectly published any advertisement relating to electrical construction which contains assertions, representations or statements which are false, deceptive or misleading;

j. Failure of the registered contractor to notify the *Building Official* of any change in the ownership, management, or business name;

k. Conducting a billboard, commercial sign, mechanical, electrical, plumbing, or building contractor business in any name other than the one registered;

l. Obtaining a billboard, commercial sign, mechanical, electrical, plumbing, or building permit for an unregistered contractor or for one whose registration has been suspended, cancelled or denied.

(3) The *Building Official* may take any of the following actions against the holder of the City license or certificate of registration:

a. No suspension.
b. Suspension for thirty (30) days.
c. Suspension for sixty (60) days.
d. Suspension for ninety (90) days.
e. Suspension for one hundred eighty (180) days.
f. Cancellation.

(4) The *Building Official* shall send the registered contractor a written notice of any administrative action to be taken against the registered contractor by certified mail, return receipt requested, at the last known mailing address. The notification shall give not less than ten (10) working days' notice of the hearing. The *Building Official* is authorized to

conduct hearings for the purpose of making findings of fact to assist him in making his decision.

(5) A written decision to cancel or suspend a certificate of registration or City license shall be required and list the reasons for the *Building Official*'s decision. This written decision shall be forwarded to the registered contractor by certified mail, return receipt requested to the registered contractor's last known address. This mailing may be waived provided that the registered contractor signs and acknowledges receipt of the written decision from the *Building Official*. The registered contractor shall then have twenty-one (21) days from receipt of this notice to appeal the *Building Official*'s decision to the building-related and fire codes board of appeals. The decision of the *Building Official* shall be final after expiration of this time.

(6) Board appellate process.

a. A registered or City licensed contractor shall have the right to appeal the *Building Official*'s decision in accordance with section 10-14 of this chapter.

b. A perfected appeal tolls the *Building Official*'s decision to suspend or cancel the registration until the board renders its decision.

c. Neither the board nor the *Building Official* shall have any authority to suspend a registration for longer than one hundred eighty (180) days.

d. A cancellation shall prevent the registered contractor from pulling new permits for a period of at least one year. For purposes of this section, a cancellation of a registration does not alleviate the registered contractor from performing current obligations or absolve them from liability under a contract. If approved by the *Building Official*, the registered contractor may perform currently permitted obligations while cancelled, the contractor shall not be subject to penalty for being unregistered. All other code provisions are applicable. Upon the expiration of a one-year period, a contractor may apply for a new certificate of registration. No provision of this section shall be interpreted to mean that a new certificate of registration will be issued after a prior certificate of registration has been cancelled. A denied applicant for a new certificate of registration is required to wait one year before applying again. There shall be no limit on the number of times a denied applicant may reapply.

e. A suspension shall prevent the registered contractor from pulling new permits in the city for the suspension time period. A suspension of registration does not alleviate the registered contractor from performing currently permitted obligations under the registered contract. If approved by the *Building Official*, the contractor shall not be subject to penalty for operating while suspended when performing currently permitted obligations. However, all other code provisions apply. The board's decision to affirm or affirm as modified a suspension of a registration means that the suspension time begins the following working day.

(l) Violations under this section. The following list shall constitute a non-exclusive list of violations under this section. It is unlawful for any registered contractor to:

(1) Display or cause a permit to be displayed or to have in one's possession any instrument purporting to be a registration, City license, or state registration for doing any construction work, knowing it to be fictitious or to have been canceled, suspended or altered;

(2) Lend or permit the use of any registration for doing any construction work to any person not entitled to it;

(3) Allow any person to display or to represent as one's own city registration, City license or state license for any construction work when the registration, City license or state license has not been lawfully issued to the person displaying it;

(4) To fail or refuse to surrender to the *Building Official* on demand any registration or city license for the doing of any mechanical, electrical, plumbing or building work, which has been suspended, canceled or revoked as provided for in this chapter;

(5) To apply for or have in one's possession more than one current registration or city license of the same type provided for in this chapter;
(6) Use a false or fictitious name or address in any application for any registration or permit provided for in this chapter or any renewal or make a false statement or conceal a material fact or otherwise commit fraud in making any application;
(7) Perform any contractor work for which a registration, City license or state license is required without having the registration, City license or state license or while the registration, City license or state license is suspended, expired or canceled;
(8) Perform any work for which a permit is required without having the permit or after the permit has been canceled;
(9) Fail or refuse to make the necessary repair or changes for code violations as provided in a written notice issued by the *Building Official*. A reasonable amount of time shall be granted in the written notice taking into consideration the work to be completed and the circumstances. A separate violation is deemed to be committed each day after the expiration of the time for correction provided in the notice until the work is corrected;
(10) Permit any construction work covered by this section to be performed by any person not properly registered, while in control of premises covered by this section;
(11) Remove, break, change, destroy, tear, mutilate, cover or otherwise deface or injure any official notice or seal posted by the *Building Official*;
(12) Place or leave the property in such condition that it injures or endangers persons or property authorized to be on the construction site.

Sec. 10-117. Irrigation systems and irrigators.

(a) License required. An irrigation contractor is required to hold a license issued under V.T.C.A., Water Code Ch. 37 and V.T.C.A., Occupations Code § 1903.251.

(b) Registration.
(1) All irrigation contractors, prior to doing any irrigation system installation in the territorial limits or extraterritorial jurisdiction (ETJ) of the city shall be required to be registered with the development services department of the city per Chapters 10-116 and 10-117.
(2) An irrigation contractor's registration must be submitted on forms available from the development services department and shall include the following information:
a. The irrigation contractor's full name;
b. The irrigation contractor's license number;
c. The irrigation contractor's business name;
d. The irrigation contractor's business address;
e. The irrigation contractor's business telephone number; and
f. The irrigation contractor's telefax number.
(3) The irrigation contractor shall provide a certificate of insurance by an insurance company authorized in the state certifying that the irrigation contractor is insured to the limit of at least:
a. Three hundred thousand dollars ($300,000.00) public liability per occurrence; and
b. Three hundred thousand dollars ($300,000.00) property liability per occurrence and product/completed operations. In lieu of insurance, the irrigation contractor may provide a bond in the amount of ten thousand dollars ($10,000.00) conditioned that the irrigation contractor shall faithfully observe all applicable laws.
(4) The irrigation contractor shall renew registration annually upon submission of the registration form and payment of the fee.
(5) A licensed plumber may be issued an irrigation permit.

(c) Permits and inspections. All irrigation contractors, prior to doing any irrigation system installation in the territorial limits or extraterritorial jurisdiction (ETJ) of the city shall apply and be

issued permits from the development services department on forms provided by said department. The irrigation system shall be installed in accordance with the following:

(1) City Code of San Antonio, Texas;
(2) Local Government Code;
(3) Texas Water Code;
(4) Texas Occupations Code; and
(5) Texas Commission on Environmental Quality (TCEQ).

The irrigation system shall be inspected prior to covering the sprinkler heads as requested by the installer. Any defects in the installation determined during the inspection shall be corrected before the inspection is considered approved. The city plumbing inspector shall document on the inspection records the static pressure and water source of the irrigation system. If the irrigation system is being constructed as part of the building permit, a certificate of occupancy shall not be issued until all inspections have been approved.

(d) Minimum standards and specifications. V.T.C.A., Occupations Code § 1903.053 entitled "Standards" and the rules adopted by the Texas Commission on Environmental Quality (TCEQ) Page 1 Chapter 344 - Landscape Irrigation Rule Project No. 2007-027-344-CE are hereby incorporated by reference as minimum standards and specifications for the design, installation, and the operation of irrigation systems.

(e) Violations and enforcement.

(1) It shall be a violation to install an irrigation system in the city without first obtaining an irrigation system permit from the development services department. Any violation of this article shall be a Class C misdemeanor punishable by a fine not to exceed five hundred dollars ($500.00) per violation. Each day or portion thereof during which a violation of any of the provisions of this article is committed shall constitute a separate offense. A fine or criminal penalty prescribed by this section does not apply to a violation in the ETJ.

(2) Civil enforcement.

a. The city may seek civil enforcement against such violators in the corporate limits of the city and in the ETJ. Enforcement in the ETJ is authorized pursuant to and under the authority granted by V.T.C.A., Local Government Code §§ 212.001 et seq.
b. Any person who commits a violation under this article shall be subject to a civil penalty of up to one thousand dollars ($1,000.00) per violation per day.

(f) Fee schedule. Irrigation related fees shall be as set forth in the city fee schedule.

Sec. 10-118. State Licensed Responsible Master Plumber registration.

(a) License. Before any person shall engage in the business of plumbing within the city, said person shall have a current responsible master plumber's license obtained from the State Board of Plumbing Examiners and the required insurance. The state license shall be registered with the city by submitting the appropriate registration as required by the city and Chapters 10-116 and 10-118.

(b) Insurance required. Per state law, a political subdivision that requires a responsible master plumber or an agent of a responsible master plumber to obtain a permit before performing plumbing in the political subdivision shall verify through the board's Internet website, or by contacting the board by telephone, that the responsible master plumber has on file with the board a certificate of insurance.

(c) Enforcement. Each locally designated plumbing inspector shall enforce the State Board Licensing Law and Board Rules and municipal ordinances and should file complaints with the Board and with local prosecutors. (Chapter 1301, Texas Occupations Code, 22 Texas Administrative Code Chapters 361, 363, 365, and 367).

(d) Requirements for plumbing companies and responsible mater plumbers. Every responsible master plumber doing plumbing work in the city shall abide by the State Board Licensing Law and Board Rules and municipal ordinances. (Chapter 1301 Occupations Code, 22 Texas Administrative Code Chapters 361, 365, and 367).

Sec. 10-119. Demolition contractor registration.

(a) Registration. It shall be unlawful for any person to maintain, own or operate a demolition contracting business, unless a registration issued by the *Building Official* is first obtained as provided herein per Chapter 10-116 and 10-119.

***Exceptions*:**

(1) A person who demolishes fences 6 feet or less in height, playground equipment, above ground swimming pools, sidewalks or driveways, decks, oil derricks, shade cloth structures, or mechanical equipment, residential or commercial sheds less than 300 square feet and similar accessory structures.
(2) A property owner may demolish single story residential structures if the demolition is to be performed by the property owner with proof of ownership.

(b) Demolition registration, insurance required, and bond.
(1) Registration. It shall be a violation of this chapter for a person who does not hold a current city registration to engage in the demolition work for which a permit is required, or to undertake to execute such work or to cause the undertaking of such work.
(2) Misrepresentation. It shall be a violation of this chapter for any person to represent themselves with any registration set forth in this Code or to use the words "demolition contractor", or words of similar import or meaning on signs, business cards, stationery, or by any other manner whatsoever, unless such person is properly registered within the meaning of the word used as provided in this chapter.
(3) General liability and insurance.
a. A registered demolition contractor shall furnish and present the name of the insurance carrier, policy number, name, address, and telephone number of the insurance agent with whom the contractor is insured to the *Building Official* or to any customer upon request.
b. City registered demolition contractors must maintain insurance of the following types and amounts:
1. Automobile liability insurance with limits of personal injury one hundred thousand dollars ($100,000.00) each person, three hundred thousand dollars ($300,000.00) each accident, property damage fifty thousand dollars ($50,000.00) each accident.
2. Public liability (bodily injury) insurance with limits not less than three hundred thousand dollars ($300,000.00) for each occurrence.
3. Public liability (property damage) insurance with limits of not less than one hundred thousand dollars ($100,000.00) for each accident and two hundred thousand dollars ($200,000.00) in the aggregate.
c. The policy shall:
1. Include the hazards of explosion and collapse coverage.
2. Provide that the same shall not be cancelled until a ten-day or non-renewal has been served upon the city Development Services Department.
3. The City of San Antonio must be listed as Certificate Holder on the Certificate of Liability insurance.
4. Applicant shall file with the *Building Official* certificates of insurance executed by the insurance carrier issuing said policies certifying that said insurance is

in full force and effect and that the demolition operations are covered by such policies.

(4) Indemnity Bond. Before such permit shall be issued, the person, firm, association or corporation applying therefore shall execute and deliver to the city, to be kept on file in the city clerk's office, a good and sufficient bond of indemnity, issued by a surety company licensed to do business in the state, in the sum of five thousand dollars ($5,000.00) to be approved by the city attorney and conditioned that the person, firm, association or corporation making such application shall promptly pay in and unto the city any and all costs, damages and expenses which said city may incur or suffer, including, but not limited to, damages to streets, sidewalks, utilities, or other public places by reason of carelessness or negligence in the performance of such demolition, or by reason of any defects caused from or arising from careless, negligent or imperfect demolition procedures, or any and all acts and omissions of said applicant, his agents, servants, or subcontractors.

(c) Responsibilities. A registered demolition contractor shall be responsible for exercising such supervision and control of his operations as is necessary to secure full compliance with the provisions of the adopted city requirements and all other applicable laws of the city, state and United States.

(d) Penalties. It shall be unlawful for any person to demolish any building or structure in the city or cause the same to be done, contrary to or in violation of any of the provisions of this Code or any currently adopted building code. Any person, firm or corporation violating any of these provisions shall be deemed guilty of a separate offense for each day or portion thereof during which any violation is committed, continued, or permitted, and each separate violation shall be punishable by a fine not to exceed five hundred dollars ($500.00).

(e) Application procedures; requirements.

(1) An applicant for an original registration or renewal must submit an application to the *Building Official* on a form established by the department.

(2) The *Building Official* shall have the right to investigate and examine the qualifications and fitness of an applicant.

(3) A person may not be issued a registration unless the person:

a. Is at least eighteen (18) years of age; and

b. Is a United States citizen or a lawfully admitted alien

(f) Duties and powers of *Building Official*.

(1) There is hereby vested in the *Building Official* the duty of examining the applications for contractor registrations, including the issuance, reissuance, renewal, suspension, or cancellation of such registration.

(2) The *Building Official* shall establish procedures consistent with this Code for the issuance of registration for demolition contractors.

(3) The *Building Official* shall have the duty to keep all registration application records. The *Building Official* shall further have the power and duty to adopt, amend, or repeal rules and regulations consistent with the provisions of this section as may be necessary for the proper administration and enforcement hereof.

(g) Appealing a denial of registration.

(1) Appeal to board. If either an original or renewal registration is denied, the *Building Official* shall furnish the applicant a written statement setting forth the grounds for the refusal within ten (10) working days. Such statement shall be by certified mail, return receipt requested, to the mailing address provided in the application unless the applicant is present to receive and acknowledge in writing receipt of such letter. The applicant or their representative shall then have fifteen (15) working days from receipt of notice to appeal the *Building Official*'s decision in accordance with section 10-14 of this chapter.

(2) Nothing in this section shall be interpreted as to deny a subsequent application at the expiration of one year from denial of initial registration.

(h) Fees and registration period. The application fee for contractor registration shall be as set forth in this section.

(1) An initial Registration fee of eighty five dollars ($85.00) is required and said registration shall be valid for a period of two (2) years. The registration holder shall be required to re-register every two-year period of time and pay a fee of thirty-five dollars ($35.00) for each two-year period of time to maintain registration.

(i) Demolition permit; in general.

(1) No person, firm, association, or corporation shall demolish any building or structure in the city, or cause the same to be done, without first obtaining a demolition permit for each such building or structure authorized by the city.

(2) Every demolition permit shall be valid during the time outlined in the permit. If demolition is not complete, the Director of Development Services may extend the permit upon request of the applicant.

(j) Application requirements.

(1) Applications for demolition permits shall require the following information:

a. Name and address of demolition contractor.

b. Name and address of building and property owners including a notarized letter authorizing demolition of building or structure.

c. Except for single-family residence and other single-story buildings where it is not possible for debris to fall on public walkways or thoroughfares, the *Building Official* shall require an engineering report, prepared by a qualified registered professional engineer, of the building or structure to be demolished so as to determine the condition of the framing, floors and walls copy of which is to be filed with the *Building Official.*

d. The demolition contractor shall be required to prepare a complete plan and schedule for demolition to be filed with the *Building Official.* Should the plan and schedule be changed at any time, the changes must be approved by the *Building Official* and a copy of such changes must be filed with the *Building Official.*

e. The location site of the disposal of debris and the proposed route to be used to disposal site.

f. Applicant shall submit the current demolition registration number and bond materials of the demolition contractor who has been hired to perform the work. All demolition contractors, as defined in this chapter, shall be registered and bonded. Any substitution of contractor listed in the application shall be reported to the *Building Official* with appropriate registration and bonding materials. A failure to notify the *Building Official* shall result in administrative and/or criminal and/or civil penalties. It shall be an affirmative defense to prosecution that substitute contractor was registered and bonded at the time.

g. Supplemental materials as prescribed by the *Building Official.*

(k) Miscellaneous provisions.

(1) No structural or load-supporting members, which would affect the stability of the structure, shall be cut, or removed from any story until all construction materials above such a story have been completely demolished and removed.

(2) No material shall be dropped to any point outside the exterior walls of the structure except in enclosed chutes.

(3) In masonry construction, the demolition of exterior walls and floor construction shall be removed and dropped into the storage space before commencing the removal of exterior walls and floor in the story below.

(4) In buildings with a structural steel frame member type construction, the steel framing may be left in place during the demolition of masonry. Where this is done, all steel beams girders and similar structural supports shall be cleared of all loose material as the masonry demolition progresses downward.

(5) No wall, chimney or other structural part shall be left at the end of each shift in such condition that it may collapse due to wind, vibration, or any other cause.

(6) Upon the completion of demolition operations, the site shall be completely cleared of rubbish, brush, weeds, and other debris. The site must be left free of ponds and underground tanks shall be removed. Basement slabs shall be broken up to allow drainage and septic tanks, wells, cesspools, and cisterns shall be broken open and filled in.

(7) Security service during non-working hours shall be provided by the contractor.

(8) Where shown to be necessary in the plan for demolition, the city shall coordinate and approve the blocking of walkways, thoroughfares, and alleys to protect the public.

(9) The city council may issue a permit for selective use of explosives for demolition purposes if the contractor has complied with all of the conditions of this chapter and if the plan for selective demolition by the use of explosives is conducted in accordance with §§ 1926.900—1926.914 inclusive of Subpart "U" of the Rules and Regulations of the Occupational Safety and Health Administration of the Department of Labor, 29 CFR, part 1926, subpart U.

(l) Demolition fee schedule.

Demolition Registration Fees	
Demolition Contractor	
Initial—City Registration/2-year registration	$85.00
Renewal—City Registration/2 year renewal	$35.00
Duplicate—City Registration Card (plus tax)	$5.00
Demolition Permit Fees	
Residential	$75.00
Commercial	
Single-story	$100.00
2—3 stories	$200.00
>3 stories	$650.00

Sec. 10-120. Registered house mover.

(a) Registration. It shall be unlawful for any person to maintain, own or operate a house moving contracting business, unless a registration issued by the *Building Official* is first obtained as provided herein Chapters 10-116 and 10-120.

(b) House mover registration, insurance, security, and bond required.

(1) Compliance with section. No person except a licensed house mover, shall move any building or structure over, across or along any street, public way, or public place within the city except as specifically provided in this article.

***Exception*:** Nothing contained in this article shall require a license or bond for the movement of oversized equipment, or buildings or structures of a temporary nature, when such equipment, building, or structures are within the legal road limit as required by the state statutes; nor shall bond

and license be required of one passing through the city enroute between two (2) other incorporated cities, except those cities in the county.

(2) General liability and insurance.

a. A registered house moving contractor shall furnish and present the name of the insurance carrier, policy number, name, address, and telephone number of the insurance agent with whom the contractor is insured to the *Building Official* or to any customer upon request.

b. City registered house moving contractors must maintain insurance of the following types and amounts:

1. ($10,000.00) for each person for bodily injury, twenty thousand dollars ($20,000.00) for bodily injury liability for each accident, and five thousand dollars ($5,000.00) for property damage liability for each accident.
2. Comprehensive general liability specifically including coverages for hazards of explosion and collapse in the amount of three hundred thousand dollars. ($300,000.00).

c. The policy shall:

1. Provide that the same shall not be cancelled until a ten-day or non-renewal has been served upon the city.
2. The City of San Antonio must be listed as certificate holder on the Certificate of Liability insurance.
3. Applicant shall file with the *Building Official* certificates of insurance executed by the insurance carrier issuing said policies certifying that said insurance is in full force and effect and that the moving operations are covered by such policies.

(3) Bond. Before a house mover's license is issued, the applicant shall file with the *Building Official* a surety bond in the amount of two thousand dollars ($2,000.00), saving and protecting the city harmless from any and all damages and to pay for any and all damages to public property, that may arise from the use of any of the streets, alleys, boulevards, or other public places in the moving of any building or structure. Such bond shall contain a provision for a ten-day written notice to the city of cancellation by the surety.

(c) Responsibilities. A registered house moving contractor shall be responsible for exercising such supervision and control of his operations as is necessary to secure full compliance with the provisions of the adopted city requirements and all other applicable laws of the city, state, and United States.

(d) Penalties. It shall be unlawful for any person to move any building or structure in the city or cause the same to be done, contrary to or in violation of any of the provisions of this Code or any currently adopted city or State laws. Any person, firm or corporation violating any of these provisions shall be deemed guilty of a separate offense for each day or portion thereof during which any violation is committed, continued, or permitted, and each separate violation shall be punishable by a fine not to exceed five hundred dollars ($500.00).

(e) Application procedures; requirements.

(1) An applicant for an original registration or renewal must submit an application to the *Building Official* on a form established by the department.

(2) The *Building Official* shall have the right to investigate and examine the qualifications and fitness of an applicant.

(3) A person may not be issued a registration unless the person:

a. Is at least eighteen (18) years of age; and

b. Is a United citizen or a lawfully admitted alien

(f) Duties and powers of *Building Official*.

(1) There is hereby vested in the *Building Official* the duty of examining the applications for contractor registrations, including the issuance, reissuance, renewal, suspension, or cancellation of such registration.

(2) The *Building Official* shall establish procedures consistent with this Code for the issuance of registration for demolition contractors.

(3) The *Building Official* shall have the duty to keep all registration application records. The *Building Official* shall further have the power and duty to adopt, amend, or repeal rules and regulations consistent with the provisions of this section as may be necessary for the proper administration and enforcement hereof.

(g) Appealing a denial of registration.

(1) Appeal to board. If either an original or renewal registration is denied, the *Building Official* shall furnish the applicant a written statement setting forth the grounds for the refusal within ten (10) working days. Such statement shall be by certified mail, return receipt requested, to the mailing address provided in the application unless the applicant is present to receive and acknowledge in writing receipt of such letter. The applicant or their representative shall then have fifteen (15) working days from receipt of notice to appeal the *Building Official*'s decision in accordance with section 10-14 of this chapter.

(2) Nothing in this section shall be interpreted as to deny a subsequent application at the expiration of one year from denial of initial registration.

(h) Fees and registration period. The application fee for contractor registration shall be as set forth in this section.

(1) An initial registration fee of one hundred and twenty dollars ($120.00) is required and said registration shall be valid for a period of two (2) years. The registration holder shall be required to re-register every two-year period of time and pay a fee of one hundred and twenty dollars ($120.00) for each two-year period of time to maintain registration.

(2) The moving of any building or structure over, across or along any street, public way, or public place within will commence only after a permit has been issued by the *Building Official*. Permit fees are outlined in Fee Schedule subsection 10-31.

(i) House moving permit; general.

(1) No person, firm, association or corporation shall move building or structure in the city, or cause the same to be done, without first obtaining a permit for each such building or structure authorized by the city.

(2) Every house moving permit shall be valid during the time outlined in the permit. The Director of Development Services may extend the permit upon request of the applicant.

(3) No person shall move any building or structure over, across, or along any street, public way, or public place within the city until a permit for such work has been issued as provided in this section.

(4) A registered house mover shall in each case before moving or preparing to move any building or structure, apply to the director of development services by written application for a permit to do so, in which application the building or structure to be moved shall be described with the extreme dimensions of its width, length and height, present location, the place to which it is proposed to be moved, and the location, on the lot at the destination.

(5) Before application for permit is made, the house mover shall notify the public utilities, railroads, and other persons whose facilities are involved in such movement.

(6) Before application for permit is made, the house mover shall notify the police department, fire department and public works department, and shall obtain proper clearance from each of these departments in writing. This clearance shall specify the day of the week, hour of the day, the moving is to take place. The route to be taken shall be at the discretion of the police department and public works department.

(7) Warning devices. If it becomes temporarily necessary to leave the building on public property, there shall be placed around the building or structure, and all equipment, red lanterns, flares, or other warning devices. No building or structure under any condition

shall be allowed to remain in or on the streets, public ways, or public places for more than twenty-four (24) hours except weekends. Any building or structure which occupies or moves along or across any portion of public property after sundown shall have sufficient lights and flares continually burning for the protection of the public.

(8) Escort. No person shall move a building or structure across or along any street, public way or public place within the city unless accompanied or escorted by at least one police officer that has been retained by the person for such service.

Secs. 10-121—10-129. Reserved.

ARTICLE XIV. SIGNS AND BILLBOARDS

Sec. 10-130. Signs and billboards.

See chapter 28 of this Code and articles I, II, III and XIII of this chapter.

ATTACHMENT B

Sec. 11-16. - Fees for certain permits and services.

(c) (1) A re-inspection fee of one hundred fifty dollars ($150.00) shall be assessed for each inspection or re-inspection, to include Failed and Phased Pass inspections, when work for which an inspection or re-inspection is requested is not approved. A re-inspection fee may also be assessed when the permit is not properly posted on the work site, when the approved plans are not readily available to the inspector, when access is not provided on the date for which inspection is requested or for noncompliance with approved plans, requiring re-Inspection and approval of the fire official. All re-inspection fees shall be paid before final release of public utilities and issuance of the certificate of occupancy.

(2) Minor re-inspection fee.... 35.00
(3) General inspection fee.... 75.00

(j)(2) Rescheduling fee. If a test or a retest of any fire protection system is canceled within ~~four (4)~~ twenty-four (24) hours of the scheduled test, a rescheduling fee of one hundred fifty dollars ($150.00) shall be paid prior to rescheduling of the required test.

ATTACHMENT C

Sec. 11-40. Amendments made to the 2021 International Fire Code.

SECTION [A]101.3 PURPOSE is amended by adding SECTION [A] 101.3.1 FIRE CHIEF AUTHORIZATION to read as follows:

[A] 101.3.1 Fire Chief Authorization. The Fire Chief is authorized to make and enforce such rules and regulations for the prevention and control of fires and fire hazards as may be necessary from time to time to carry out the intent of this Code. Three certified copies of such rules and regulations shall be filed with the City Clerk of the City of San Antonio and shall be in effect immediately thereafter and additional copies shall be kept in the office of the Fire Department for distribution to the public.

SECTION [A] 104 DUTIES AND POWERS OF THE FIRE CODE OFFICIAL is amended by adding SECTION 104.1.1 AUTHORITY OF THE FIRE CHIEF AND THE FIRE DEPARTMENT and SECTION 104.1.2 ADDITIONAL DUTIES AND POLICE POWERS OF FIRE DEPARTMENT MEMBERS to read as follows:

[A] 104.1.1 Authority of the fire chief and the fire department. The Fire Chief is duly authorized to act by any means he deems necessary to protect life and property from fire hazards. The Fire Chief may delegate his power to any other member of the Fire Department.

[A] 104.1.2 Additional duties and police powers of fire department members. In addition to the duties required or prescribed for members of the Fire Department in connection with the regular functions of such department, when so required by order of the City Manager in case of riots, floods, or other public emergencies or catastrophes or public danger of any sort, and all fires by order of the Fire Chief, Deputy Chief, Assistant Chief, District Chief, or any Captain or Lieutenant of the Fire Department, each and all members of the Fire Department shall be and become vested with full Police powers and shall perform all duties required for the protection of persons or property or the preservation of public safety, peace and order.

SECTION [A] 104.3 RIGHT OF ENTRY is amended to read as follows:

[A] 104.3 Right of entry.

Where it is necessary to make an inspection to enforce the provisions of this code, or where the *fire code official* has reasonable cause to believe that there exists in a building or upon any premises any conditions or violations of this code that make the building or premises unsafe, dangerous or hazardous, the *fire code official* shall have the authority to enter the building or premises at all reasonable times to inspect or to perform the duties imposed upon the *fire code official* by this code. If such building or premises is occupied, the *fire code official* shall present credentials to the occupant and request entry. If such building or premises is unoccupied, the *fire code official* shall first make a reasonable effort to locate the owner, the owner's authorized agent or other person having charge or control of the building or premises and request entry. If entry is refused, the *fire code official* has recourse to every remedy provided by law to secure entry.

No owner or occupant or any other person having charge, care or control of any building or premises shall fail or neglect, after proper demand is made as herein provided, to properly permit entry therein by the Chief or his authorized representative for the purpose of inspection or examination under such exigent circumstances affecting the safety of persons and/or property, or to take such prudent action to extinguish a fire or abate a fire hazard.

SECTION [A]104.3 RIGHT OF ENTRY is amended by adding SECTION [A]104.3.2 PHOTOGRAPHIC DOCUMENTATION to read as follows:

[A] 104.3.2 Photographic documentation. Members of the Fire Department making such examinations or inspections shall have the right, with proper credentials, and be authorized to take a reasonable number of photographs or videotapes for evidence and for records for use by the Fire Department to study hazards and scientific control for fire safety.

SECTION [A] 104.4 IDENTIFICATION is amended by adding SECTION [A] 104.4.1 IMPERSONATION to read as follows:

[A] 104.4.1 Impersonation. A person shall not impersonate the fire code official or his designee through the use of a uniform, identification card, badge, or any other means. Any such impersonation shall be deemed a violation of this Code.

SECTION [A]105.2 APPLICATION is amended by adding SECTION[A] 105.2.5 INVESTIGATION FEE/WORKING WITHOUT A PERMIT to read as follows:

[A] 105.2.5 Investigation fee/working without a permit. Work requiring a permit shall not commence until said permit is posted in a conspicuous place on the job site and approved plans are available at this location. Where work is commenced prior to obtaining said permit, the fees provided for in Section 11-16 of the City Code may be doubled, but the payment of such double fee shall not relieve any person from fully complying with the requirements of Chapter 11 as amended by this ordinance in the execution of the work nor of any other penalties prescribed herein.

SECTION 105.5 REQUIRED OPERATIONAL PERMITS is amended to read as follows:

105.5 Required operational permits. The fire code official is authorized to issue operational permits for the operations set forth in Sections 105.5.1 through ~~105.5.52~~ 105.5.56. Required permits and associated fees are listed in Chapter 11, Section 11-16, in Chapter 16 entitled Licenses and Business Regulations, Article I, *In General,* Sec. 16-3 for hazardous materials, and in other associated chapters of this code. Materials stored, used, dispensed, or handled in amounts exceeding the amounts listed in TABLE 105.5.9 PERMIT AMOUNTS FOR COMPRESSED GASES, TABLE 105.5.11 PERMIT AMOUNTS FOR CRYOGENIC FLUIDS, and TABLE 105.5.22 PERMIT AMOUNTS FOR HAZARDOUS MATERIALS are subject to the provisions of this section.

SECTIONS 105.5.1 ADDITIVE MANUFACTURING THROUGH 105.5.8 COMBUSTIBLE FIBERS, 105.5.10 COVERED AND OPEN MALL BUILDINGS, 105.5.12 CUTTING AND WELDING THROUGH 105.5.15 EXHIBITS AND TRADE SHOWS, 105.5.17 FIRE HYDRANTS AND VALVES THROUGH 105.5.21 FUMIGATION AND INSECTICIDAL FOGGING, 105.5.24 HIGH-PILED STORAGE THROUGH 105.5.33 MOTOR FUEL DISPENSING FACILITIES, 105.5.37 ORGANIC COATINGS THROUGH 105.5.40 PLANT EXTRACTION SYSTEMS, 105.5.43 PYROXYLIN PLASTICS THROUGH 105.5.46 ROOFTOP HELIPORTS, AND 105.5.48 STORAGE OF SCRAP TIRES AND TIRE BYPRODUCTS THROUGH 105.5.52 WOOD PRODUCTS are repealed.

TABLE 105.5.9 PERMIT AMOUNTS FOR COMPRESSED GASES is amended by deleting "Type of Gas" ~~*Carbon dioxide used in insulated liquid carbon dioxide beverage dispensing applications.*~~

SECTIONS 105.5.18 FLAMMABLE AND COMBUSTIBLE LIQUIDS and 105.5.22 HAZARDOUS MATERIALS are amended to read as follows:

105.5.18 Flammable and combustible liquids. An operational permit is required:

1. To use or operate a pipeline for the transportation within facilities of flammable or combustible liquids. This requirement shall not apply to the off-site transportation in pipelines regulated by the Department of Transportation (DOT) nor does it apply to piping systems.
2. To store, handle or use Class I liquids in excess of 5 gallons (19 L) in a building or in excess of 10 gallons (37.9 L) outside of a building, except that a permit is not required for the following:
   2.1. The storage or use of Class I liquids in the fuel tank of a motor vehicle, aircraft, motorboat, mobile power plant or mobile heating plant, unless such storage, in the opinion of the fire code official, would cause an unsafe condition.
   2.2. The storage or use of paints, oils, varnishes or similar flammable mixtures where such liquids are stored for maintenance, painting or similar purposes for a period of not more than 30 days.
3. To store, handle or use Class II or Class IIIA liquids in excess of 25 gallons (95 L) in a building or in excess of 60 gallons (227 L) outside a building, except for fuel oil used in connection with oil-burning equipment.
4. To store, handle or use Class IIIB liquids in tanks or portable tanks for fueling motor vehicles at motor fuel-dispensing facilities or where connected to fuel-burning equipment. Exception: Fuel oil and used motor oil used for space heating or water heating.
5. To remove Class I or II liquids from an underground storage tank used for fueling motor vehicles by any means other than the approved, stationary on-site pumps normally used for dispensing purposes.
6. To operate tank vehicles, equipment, tanks, plants, terminals, wells, fuel-dispensing stations, refineries, distilleries and similar facilities where flammable and combustible liquids are produced, processed, transported, stored, dispensed or used.
7. To place temporarily out of service (for more than 90 days) an underground, protected above-ground or above-ground flammable or combustible liquid tank.
8. To change the type of contents stored in a flammable or combustible liquid tank to a material that poses a greater hazard than that for which the tank was designed and constructed.
9. To manufacture, process, blend or refine flammable or combustible liquids.
10. ~~To engage in the dispensing of liquid fuels into the fuel tanks of motor vehicles at commercial, industrial, governmental or manufacturing establishments in accordance with Section 5706.5.4 or to engage in on-demand mobile fueling operations in accordance with Section 5707.~~
11. ~~To utilize a site for the dispensing of liquid fuels from tank vehicles into the fuel tanks of motor vehicles, marine craft and other special equipment at commercial, industrial, governmental or manufacturing establishments in accordance with Section 5706.5.4 or, where required by the fire code official, to utilize a site for on-demand mobile fueling operations in accordance with Section 5707.~~

105.5.22 Hazardous materials. An operational permit is required to store, transport on site, dispense, use, or handle hazardous materials in excess of the amounts listed in Table 105.5.22. Permit fees are listed in Chapter 16 entitled Licenses and Business Regulations, Article I, *In General,* Sec. *16-3 for hazardous materials.*

SECTION 105.5.32 MOBILE FOOD PREPARATION VEHICLES is hereby repealed and replaced with SECTION 105.5.32 MOBILE FOOD ESTABLISHMENTS to read as follows:

105.5.32 Mobile food establishments. An operational permit is required for the operation and maintenance of a mobile food establishment. Small, lightweight vendor push carts, as determined by the fire code official, are not covered under this section. For permit to operate a Mobile Food Establishment, see Section 319, Permit fee information in Chapter 11, Section 11-16 of the City Code.

SECTION 105.5.47 SPRAYING OR DIPPING is amended to read as follows:

105.5.47 Spraying or dipping. An operational permit is required to conduct a spraying or dipping operation utilizing flammable or combustible liquids, or the application of combustible powders regulated by Chapter 24. All spray booths (to include permanent, temporary, and mobile spraying and dipping operations) require an operational permit and approval by the *fire code official.*

SECTION 105.5 REQUIRED OPERATIONAL PERMITS is amended adding SECTIONS 105.5.53 IN-BUILDING TWO-WAY RADIO ENHANCEMENT SYSTEM, 105.5.54 FOOD BOOTHS, 105.5.55 PORTABLE OUTDOOR GAS-FIRED HEATING APPLIANCES and 105.5.56PARADE FLOATS to read as follows:

105.5.53. In-building two-way radio enhancement system. An operational permit is required for the operation of any In-Building Two-Way Radio Enhancement System.

105.5.54 Food booths. An operational permit is required for the operation of a food booth. For permit to operate a food booth, see Section 322. Permit fee information can be found in Chapter 11, Section 11-16 of the City Code.

105.5.55 Portable outdoor gas-fired heating appliances. An operational permit is required for the operation and maintenance of a portable outdoor gas-fired heating appliance. For permit to use portable outdoor gas-fired heating appliances, see Section 323.

105.5.56 Parade floats. An operational permit is required to operate a Parade Float. For permit to operate a Parade Float see Section 324. Permit fee information can be found in Chapter 11, Section 11-16 of the City Code.

SECTION [A]105.6 REQUIRED CONSTRUCTION PERMITS is amended to read as follows:

Section [A] 105.6 Required construction permits. The fire code official is authorized to issue construction permits for work as set forth in Section 105.6.1 through 105.6.24. *Required permits and associated fees can be found in Chapter 11, Section 11-16 of the City Code.*

SECTIONS 105.6.5 ENERGY STORAGE SYSTEMS, [A]105.6.9 FUEL CELL POWER SYSTEMS THROUGH [A]105.6.11 GATES AND BARRICADES ACROSS FIRE APPARATUS ACCESS ROADS, [A]105.6.13 HIGH-PILED COMBUSTIBLE STORAGE THROUGH [A]105.6.17 PLANT CERTIFICATION SYSTEMS and [A]105.6.20 SOLAR PHOTOVOLTAIC POWER SYSTEM are repealed.

SECTION [A] 105.6.7 FIRE PUMPS AND RELATED EQUIPMENT is amended to read as follows:

[A[105.6.7 Fire pumps and related equipment. A construction permit is required for installation of or modification to fire pumps and related fuel tanks, jockey pumps, controller, and generators. Maintenance performed in accordance with this code is not considered to be a modification and does not require a construction permit. A fuel storage tank permit is required for the installation of a diesel pump fuel tank 60 gallons or larger.

SECTION 105 PERMITS is amended by adding SECTION [A] 105.6.12.1 CONSTRUCTION DOCUMENTS to read as follows:

[A] 105.6.12.1 Construction documents. The construction documents for the following tanks shall be prepared by a professional engineer licensed by the State of Texas:

1. Above ground storage tanks (AST) of 1320 gallons or larger used to store flammable liquids. (Class 1A,1B, 1C)
2. All underground tanks used for the storage and dispensing of flammable or combustible liquids.

SECTION [A]106 CONSTRUCTION DOCUMENTS is amended by adding SECTION [A] 106.2.1.1 OCCUPANCY CLASSIFICATION LETTER to read as follows:

106.2.1.1 Occupancy classification letter. Two copies of a completed "Occupancy Classification Letter" (a.k.a. "Commodities Letter") or other approved Fire Protection report shall be submitted to the City for buildings or portions thereof that are to be used for any of the following purposes:

1. Warehousing or storage
2. Retail including rack display of products
3. Hazardous material storage and/or use
4. Manufacturing

The Occupancy Classification Letter is required to be submitted:

1. with the building permit submittal documents when seeking a building permit,
2. to the SAFD Fire Inspector during a Certificate of Occupancy inspection, or
3. at any other time when required by the fire code official.

The Occupancy Classification Letter is to be prepared by the owner and/or tenant of the building/space in question or a registered design professional. It is to be signed, dated and on company letterhead. If the Occupancy Classification Letter is prepared by a registered design professional representing the owner and/or tenant of the building/space in question, the letter is to be countersigned by the owner and/or tenant. The Occupancy Classification Letter is to be kept on site at all times. Prior to a change in 1) the type or amount of hazardous material(s) used or stored, 2) the type or amount of storage or storage height or method, or 3) the manufacturing process, a revised Occupancy Classification Letter is to be submitted to the Fire Chief or his designee for review.

SECTION 111 MEANS OF APPEALS is repealed and replaced with SECTION 111 BUILDING-RELATED AND FIRE CODES APPEALS AND ADVISORY BOARD to read as follows:

SECTION 111
BUILDING-RELATED AND FIRE CODES APPEALS AND ADVISORY BOARD

All Chapter 11 appeals and advisory opinions shall be directed to and addressed by the Building-related and Fire Code Appeals and Advisory Board, as codified in Chapter 10, Section 10-14 of the City Code of San Antonio, Texas.

SECTION [A] 112 VIOLATIONS is amended by adding SECTION [A] 112.1.1 WORK STARTED WITHOUT A PERMIT to read as follows:

[A] 112.1.1 Work started without a permit. No work shall be started on any Fire Protection System at a new construction site or an existing structure, other than maintenance work, without a permit being issued, without a FAST-TRACK permit being issued, or without approval from the Fire Marshal. Both the individual contractor and the site general contractor may be held liable for such actions.

SECTION [A] 112.4 VIOLATION PENALTIES is amended to read as follows:

[A] 112.4 Violation penalties. Persons who shall violate a provision of this code or shall fail to comply with any of the requirements thereof or who shall erect, install, alter, repair or do work in violation of the *approved construction documents* or directive of the *fire code official*, or of a permit or certificate under provisions of this code shall be guilty of a ~~[specify offense]~~Class C Misdemeanor as defined by the Municipal Code of the City of San Antonio. ~~punishable by a fine of not more than [AMOUNT] dollars or by imprisonment not exceeding [NUMBER OF DAYS], or both such fine and imprisonment~~. Each day that a violation continues after due notice has been served shall be deemed a separate offense.

SECTION [A]114 UNSAFE STRUCTURES OF EQUIPMENT is amended by adding [A] 114.2.1 REMOVAL OF OCCUPANTS to read as follows:

[A] 114.2.1 Removal of occupants. A member of the Fire Department is authorized to require the removal of occupants at a location when actual occupancy exceeds the permitted or posted occupant load. A person commits an offense if he refuses to obey an order to vacate.

SECTION 202, GENERAL DEFINITIONS is amended by adding definitions and modifying existing definitions to read as follows:

SECTION 202

GENERAL DEFINITIONS

ADMINISTRATOR is the City Manager for the City of San Antonio, Texas.

AUTHORIZED EMERGENCY VEHICLE shall have the meaning set out in the Texas Transportation Code § 541.201.

DESIGNATED PREMISES shall mean property being used for a purpose allowed as a permitted use in an Apartment District, Office District, Local Retail District, Business District, Commercial District, Manufacturing District, Multiple Family Residence District, Mobile Home District, Townhouse Residence District, Industry District, or Planned Unit Development District as those terms are used in Chapter 35 of the City Code of San Antonio, Texas, whether or not the premises are so zoned, or a public or private school, or a church, or a facility owned or operated by the City or Bexar County or by a city-owned utility, where off-street parking is provided on the premises for occupants thereof and others.

[BF] 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 ft ^{2} 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 ft ^{2} 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 percent 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 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.

FESTIVAL SEATING shall mean a form of audience/spectator accommodation in which no seating, other than a floor or ground surface, is provided for the audience/spectators gathered to observe a performance.

~~FIRE LANE: a road or other passageway developed to allow the passage of fire apparatus. A fire lane is not necessarily intended for vehicular traffic other than fire apparatus.~~

FIRE LANE shall mean any area appurtenant to entrances or exits of a building deemed necessary by the Fire Chief or his designee to remain free and clear of parked vehicles for access to such building in case of fire or other emergency and designated by him as such, and may include sidewalks, driveways, portions of parking lots, or any other area adjacent to or near building entrances or exits, or any fire hydrant.

FIRE MARSHAL shall mean the fire code official responsible for investigations of fires, inspection of facilities, and code enforcement.

FIRE WATCH. A temporary measure intended to ensure continuous and systematic surveillance of a building or portion thereof by one or more qualified individuals for the purposes of identifying and controlling hazards, detecting early signs of unwanted fire, raising an alarm of fire and notifying the fire department. Qualified individuals are defined as State Certified Fire Inspectors assigned to the Fire Prevention Division of the City of San Antonio, or, if approved by the Fire Marshal, Texas Certified Firefighters, Peace Officers, individuals employed by a private security firm, or other designated individuals whose sole duty when assigned a fire watch is to perform constant patrols of the premises and keep watch for signs of unwanted fire. A written log must be maintained, and personnel must have at least one approved means of notifying the fire department of fire or other emergencies.

FOSTER CARE FAMILY HOME shall mean a single independent residential occupancy that is the primary residence of the caregiver and licensed by the state to provide twenty-four (24) hour care for six or fewer children (including those related to the caregiver) up to the age of eighteen (18) years.

HIGHWINDS. Sustained wind velocity of 15 mph or gusts of 25 mph.

MAINTENANCE AGREEMENT: A contractual agreement between a building owner and a licensed or registered firm to perform general maintenance work to life safety or fire protection or detection systems including, but not limited to, upgrades to an existing system that do not include modification to the existing system configuration and repair of fault conditions. Such an agreement may include provisions for testing and inspection in accordance with appropriate standards.

MOBILE FOOD ESTABLISHMENT shall mean a mobile food operation using any heat producing equipment to cook, fry, or warm products for consumption from a motorized vehicle, towable trailer, or watercraft.

~~MOBILE FOOD PREPARATION VEHICLES. Vehicles that contain cooking equipment that produce smoke or grease laden vapors for the purpose of preparing and serving food to the public. Vehicles intended for private recreation shall not be considered mobile food preparation vehicles.~~

MONITORING AGREEMENT: A contractual agreement between a building owner and a licensed or registered firm to provide monitoring service when required. Such service shall include either remote or central service.

NIGHT CLUB shall mean a *tavern* (as defined by the Unified Development Code, City of San Antonio, Texas) with more than 2,000 square feet of building area excluding kitchen, restrooms and storage areas. A nightclub use may include, in addition to the provision of alcohol for on premise consumption, a dance hall or dance floor, food services, and/or *live entertainment* (as defined by the Unified Development Code, City of San Antonio, Texas) as an accessory use when conducted less than 3 days per week. *Taverns* with less than 2,000 square feet of building area excluding kitchen, restrooms, and storage areas will be considered a nightclub for the purposes of this code if, in addition to the provision of serving alcohol for on premise consumption, the establishment provides all of the following:

1. Live entertainment (as defined by the Unified Development Code, City of San Antonio, Texas) or pre-recorded music, and
2. A dance floor and
3. Hours of operation that extend past 10:00 pm.

Exceptions: Restaurants with a tavern as an accessory use, or establishments with 501 (c)(3) non-profit, tax exempt status.

[BG] 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 Care Family Homes

PARK shall mean the standing of a vehicle, whether occupied or not, upon a street otherwise than temporarily for the purpose of, and while actively engaged in, receiving or discharging passengers or loading or unloading merchandise or in obedience to traffic regulations, signs, or signals or an involuntary stopping of a vehicle by reason of a cause beyond the control of the operator of the vehicle.

PORTE COCHERE. A roofed structure that is open on at least three sides and extends from the building entrance over an adjacent driveway and shelters vehicle ingress and egress.

SPECIAL EVENT shall mean an indoor or outdoor event that, in the opinion of the Fire Code Official or their designee, meets any of the following criteria:

1. Constitutes a use or occupant load ordinarily not permitted by the face of the Certificate of Occupancy.

2. Requires the means of egress to be altered from a configuration that was previously approved by the Building Code Official, Fire Code Official, or their designee (e.g., installation of booths, curtains, partitions, tables/chairs, etc. or the locking of select doors to limit access to portions of a building or area).

3. Poses a condition that compromises any life safety systems that were previously approved by the Building Code Official, Fire Code Official, or their designee (e.g., reduced lighting, increased sound levels, installation of alternate interior finishes, etc.).

4. Poses a condition that reduces the effectiveness of public safety services of any kind (e.g., Conditions that result in reduced access to fire hydrants, sprinkler riser/pump rooms, Fire Department Connections, etc.)."

NOTE: *Special Events* required to submit plans for each event (review and inspection) in accordance with Section 11-16 *Special Event Inspection* may submit standard configuration plan packages to the San Antonio Fire Department Fire Prevention Division for review and inspection on an annual basis. Any deviation from the standard configuration as described in the above criteria will require new plans to be submitted for review each time the *approved* standard configuration is altered. Approved standard configurations for *Special Events* are required to be reviewed and inspected for code compliance once per year.

SPECIAL HAZARD SYSTEM shall include any one of the following:

1. Carbon Dioxide Extinguishing Systems complying with Section 904.8 and NFPA Standard 12
2. Halon 1301 Systems complying with Section 904.9 and NFPA Standard 12A
3. Explosion Prevention Systems complying with Section 911.3 and NFPA Standard 69
4. Clean Agent Fire Extinguishing Systems complying with 904.10 and NFPA Standard 2001
5. Fixed Aerosol Fire Extinguishing Systems complying with Section 904.12 and NFPA Standard 2010

TESTING AND INSPECTION AGREEMENT: A contractual agreement between a building owner and a licensed or registered firm to perform testing and inspection work only for life safety or fire protection and detection equipment in accordance with appropriate standards.

SECTION 304 COMBUSTIBLE WASTE MATERIAL is amended by adding SECTION 304.2.1 DANGEROUS STORING OF COMBUSTIBLES to read as follows:

304.2.1 Dangerous storing of combustibles. It shall be unlawful and a nuisance for any person to have or keep or store, within the city, any quantity of tar, pitch, resin, petroleum or its products, or other combustible materials or substances in such manner that such materials or substances shall be in danger of taking and communicating fire.

SECTION 305 IGNITION SOUIRCES is amended by adding SECTION 305.6 IGNITED MATERIALS IN STREETS PROHIBITED to read as follows:

305.6 Ignited materials in streets prohibited. No person may place or possess burning materials on a street, alley, or public easement if that conduct creates a disturbance or causes a fire hazard.

SECTION 307.1 GENERAL is amended by adding SECTION 307.1.2 CARRYING BURNING MATERIALS to read as follows:

307.1.2 Carrying burning materials. No person in the city shall carry or cause to be carried, in any street or other thoroughfare, any burning coal or firebrands, unless the same is shut up in a covered vessel.

SECTION 307.2 PERMIT REQUIRED is amended by adding SECTION 307.2.2 BURNING RUBBISH, BRUSH AND OTHER COMBUSTIBLE MATTER to read as follows:

307.2.2 Burning rubbish, brush and other combustible matter.

1. Unlawful to burn trash without permit. It shall be unlawful for any person to burn or cause to be burned, any trash, brush, tree limbs, grass, trees, leaves, paper, boards, planks, shavings, or any other combustible materials whatsoever within the corporate limits of the City, without first having a permit as required by subsection (2) of this section, unless the same is burned in an incinerator or container which has been approved in writing by the Fire Chief or his designee, and said incinerator or container when used for burning shall be located in such a way that no smoke shall go into surrounding buildings, nor shall the operation of said incinerator or container create a fire hazard to the surrounding property.
2. Application for a permit. Any person desiring to burn any trash or other combustible material within the City shall make application to the Fire Chief or his designee for a permit to burn said materials. The application for a permit shall contain the following information:
    a. The name, address and telephone number of the person making application for permit.
    b. The type of material and the quantity to be burned.
    c. The location in the City at which the material is to be burned and the legal description of the property together with the name and owner of the property.
    d. The date on which the material is to be burned and the time at which the burning will commence and the estimated time necessary to complete the burning.
    e. A statement by the person making the application that he assumes all liability and responsibility for all damages to all persons and property by reason of the fire, and that he will take all necessary precautions to ensure that no damages result from the fire.
    f. A statement by the person making the application for a permit that he will burn the materials only on the date and at the time designated in the permit issued by the Fire Chief or his designee, and in accordance with any special instruction set forth in the permit issued by the Fire Chief's Office.
3. Permit issued after investigation. When an application to burn any trash or other combustible materials is made to the Fire Chief, and such burning is not a violation of air pollution standards, he shall make an inspection of the premises on which the material is to be burned and the surrounding property to determine if the burning, as requested by the applicant would be a fire hazard and dangerous to the adjoining or nearby property. If the Fire Chief, or his designee, finds from his inspection of the property that the burning would not be a fire hazard or danger to adjoining or nearby property, or violation of air pollution standards, he shall cause to be issued a permit which shall contain the following information and conditions:

a. The name, address and telephone number of the person to which the permit is issued.

b. The location, address and telephone number of the person for which the material is to be burned.

c. The date and time at which the material is to be burned.

d. A statement that the applicant assumes all liability and responsibility for all damages to all persons and property by reason of the fire.

e. That the fire will not be left unguarded at any time during the burning and that an adult person shall be in attendance at all times.

f. Any condition which the Fire Chief or his designee find from the surrounding circumstances to be necessary to prevent the fire from being a fire hazard and a danger to adjoining or nearby property.

4. When not to issue a permit. No permit shall be issued for the burning of any materials at any time except during the day between one hour after sunrise and one hour before sunset, except for ceremonial bonfires, when:

a. The site of the bonfire has been approved by the Fire Chief or his designee; and

b. The bonfire is held under the supervision of Fire Department personnel. Failure of any person or persons at such a bonfire to adhere to fire safety instructions and requirements of the Fire Department representative assigned to supervise same shall constitute a violation of this chapter. No permit shall be issued if the burning would be contrary to the provisions of this section, nor shall such permit be issued if the Fire Chief, or his designee, shall have reason to believe that weather conditions, type or location of the materials to be burned, or the use of property within the area affected would cause the burning to be a hazard or otherwise violate the provisions of this section.

SECTION 308.1.4 OPEN-FLAME COOKING DEVICES is amended to read as follows:

308.1.4 Open-flame cooking devices. Charcoal burners and other open-flame cooking devices shall not be operated on combustible balconies or within 10 feet (3048 mm) of a combustible ~~construction~~ surface.

Exceptions:

1. One-and two-family dwellings.
2. ~~Where buildings, balconies and decks are protected by an *automatic sprinkler system*.~~ Group R occupancies in compliance with the provisions, and meeting exceptions, of Section 308.4.2.
3. ~~LP-gas cooking devices having LP-gas container with a water capacity not greater than 2½ pounds.~~

SECTION 308.1 GENERAL is amended by adding SECTION 308.1.9 PROJECTION OF IGNITED MATERIALS to read as follows:

308.1.9 Projection of ignited materials. No person shall drop or throw ignited material from a structure or vehicle.

SECTION 308 OPEN FLAMES is amended by adding SECTION 308.3.3 CHAFING FUEL DEVICES and SECTION 308.4.2 FIRE HAZARD PROHIBITED to read as follows:

308.3.3 Chafing fuel devices. Single-well cooking equipment using combustible oils or solids (chafing fuels) shall meet the following criteria:

1. They shall be used in commercially available devices intended for use with chafing fuels.
2. They shall be secured to the device to prevent tipping and unintentional movement.
3. They shall have lids available for immediate use.
4. They shall be used for warming only and not cooking.
5. They shall be limited to two ft^2 (0.2 m^2) of warming surface.
6. They shall be placed on noncombustible surface materials.
7. They shall be separated from each other by a horizontal distance of not less than 24 in. (610 mm).
8. They shall be kept at a horizontal distance of not less than 24 in. (610 mm) from any combustible material.
9. A portable extinguisher with a minimum of a 2-A:10-B:C rating shall be provided within 30 ft of each chafing fuel device, or an approved automatic extinguishing system shall be provided.

308.4.2 Fire hazard prohibited. in Group R, Division 1 & 2 occupancies, a person shall not construct, erect, install, maintain or use any incinerator, barbecue pit or grill, or fuel fired lanterns, heaters, or torches or so burn any combustible material as to constitute or occasion a fire hazard by the use or burning thereof or as to endanger the life or property of any person thereof.

The use or burning of any such devices under the following conditions shall constitute a fire hazard and is strictly prohibited:

1. Within 10 linear feet of any combustible surface, including but not limited to decks, porches, balconies, walls, or verandas.
2. Beneath any balcony, porch, roof overhang, deck, or veranda.

Exceptions:

1. Fuel burning devices supplied by the building's source of fuel with additional safeguards as *approved* by the *fire code official*.
2. Outdoor kitchens connected as part of the R-1 or R-2 common recreation area with additional safeguards as *approved* by the *fire code official.*
3. One- and two-family dwellings, except where use or burning is within 5 feet of adjacent structure or neighboring property.

SECTION 314.4 VEHICLES is amended to read as follows:

314.4 Vehicles. Liquid-fueled or gaseous-fueled vehicles, aircraft, boats, or other motorcraft shall not be located indoors except as follows:

1. The engine starting system is made inoperable or batteries are disconnected, except where the *fire code official* requires that the batteries remain connected to maintain safety features.

2. Fuel in fuel tanks does not exceed one-quarter tank or 5 gallons (19L) (whichever is least) or for large diesel vehicles, minimum amount required to position vehicle.

   Exception: Increase in fuel quantity may be authorized with additional safeguards or as *approved* by the *fire code official*.

3. Fuel tanks and fill openings are closed and sealed to prevent tampering.

4. Vehicles, aircraft, boats or other motorcraft equipment are not fueled or defueled within the building.

SECTION 315.3.1 CEILING CLEARANCE is amended to read as follows:

315.3.1 Ceiling clearance. Storage shall be maintained 2 feet (610 mm) or more below the ceiling in nonsprinklered areas of buildings or not less than 18 inches (457 mm) below the level of the sprinkler head deflectors in sprinklered areas of buildings.

Exceptions:

1. The 2-foot (610 mm) ceiling clearance is not required for storage along walls in nonsprinklered areas of buildings.

2. The 18-inch (457 mm) ceiling clearance is not required for storage along walls in areas of buildings equipped with an *automatic sprinkler system* in accordance with 903.3.1.1, 903.3.1.2 or 903.3.1.3

SECTION 315.3.3 EQUIPMENT ROOMS is amended to read as follows:

315.3.3 Equipment rooms. Combustible material shall not be stored in boiler rooms, mechanical rooms, electrical equipment rooms or in *fire command centers* as specified in Section 508.1.5, nor within 10 feet of any furnace or boiler room door.

SECTION 319 MOBILE FOOD PREPARATION VEHICLES is amended to read as follows:

SECTION 319
~~MOBILE FOOD PREPARATION VEHICLES~~ MOBILE FOOD ESTABLISHMENTS

319.1 General. Mobile food ~~preparation vehicles~~ establishments that are equipped with appliances that produce smoke or grease-laden vapors shall comply with this section.

319.2 Permit required. ~~Permits shall be required as set forth in Section 105.5.~~ It shall be unlawful to operate mobile food establishments without a permit as required by Section 105.5.32. Annual mobile food establishment permits must be displayed in a visible location in or on the mobile food establishment.

319.2.1 Site placement. Mobile food establishments left on site for more than 24 hours at carnivals, fairs, festivals, or other public events will be subject to Food Booth permit requirements, inspections, and fees as set forth in Section Chapter 11, Section 11-16 of the City Code and Section 105.5.32 of this code in addition to any fees associated with the annual mobile food establishment permits.

319.3 Exhaust hood. All Mobile Food Establishments permitted ~~after 90 days of the adoption of this code~~ after January 1, 2019, which utilize ~~C~~cooking equipment that produces grease-laden vapors, shall be provided with a kitchen exhaust hood in accordance with Section 606.

319.4 Fire protection. Fire protection shall be provided in accordance with Sections 319.4.1 ~~and 319.4.2~~ through 319.4.4.

319.4.1 Fire protection for cooking equipment. Cooking equipment shall be protected by automatic fire extinguishing systems in accordance with Section 904.13 when Section 319.3 applies.

319.4.2 Fire extinguisher. Portable fire extinguishers shall be provided in accordance with Section 906.4 and shall have a minimum of one (2A:10BC) portable fire extinguisher mounted in a conspicuous place within the kitchen area.

319.4.3 Additional extinguishers. In addition to any other required fire extinguisher, all mobile food vendors who deep fry shall have a class K portable fire extinguisher for up to four fryers having a maximum cooking medium capacity of 80 pounds each. For every additional group of four fryers having a maximum cooking capacity of 80 pounds each, an additional class K extinguisher will be required. For individual fryers exceeding six square feet in surface area, class K extinguishers will be installed in accordance with manufacturers' recommendations.

319.4.4 Generators. Mobile food vendors with portable generators shall have a (3A:40BC) portable fire extinguisher in addition to the other fire extinguishers.

319.5 Appliance connection to fuel supply piping. Gas cooking appliances shall be secured in place and connected to fuel-supply piping ~~with an appliance connector complying with ANSI Z21.69/CSA 6.16. The connector installation shall be configured~~ in accordance with the manufacturer's installation instructions. ~~Movement of appliances shall be limited by restraining devices installed in accordance with the connector and appliance manufacturers' instructions.~~

319.6 Baffles and Closures

319.6.1 Baffles. All deep-fat fryers shall have a steel baffle between the fryer and surface flames of an adjacent appliance or shall maintain a 16-inch separation distance. The baffle, if installed, shall be eight inches in height.

319.6.2 Lids. A positive closing lid shall be required on the fryer with latching mechanisms that secure it in the open and closed positions. Exception: fryers installed under a fixed pipe extinguishing system.

319.7 Emergency egress. Emergency egress shall comply with Sections 319.7.1 through Section 319.7.2.2.

319.7.1 Aisles. Mobile food establishments shall have a clear, unobstructed height over the aisle-way portion of the unit of at least 74 inches from floor to ceiling, and a minimum of 30 inches of unobstructed horizontal aisle space.

319.7.2 Additional exit. Should travel distance from any portion of the interior exceed 10 feet, the mobile food establishments shall have a minimum of two exits located remote from each other and so arranged as to provide a means of unobstructed travel to the outside of the vehicle.

319.7.2.1 Exit location. A secondary means of egress shall be located remote of the main exit door, with an unobstructed minimum passage of 24" X 24 " to the outside. The bottom of this secondary means of egress shall not be more than four feet above the

vehicle floor or a readily accessible horizontal surface capable of supporting a weight of 300 pounds minimum opening to the outside.

319.7.2.2 Latching. The latch mechanism of any exit facility shall be operable by hand, and shall not require the use of a key or special knowledge for operation from the inside. The secondary exit shall be labeled with the word "EXIT" with two-inch minimum letters on contrasting background.

~~**319.6 Cooking oil storage containers**. Cooking oil storage containers within mobile food preparation vehicles shall have a maximum aggregate volume not more than 120 gallons (454 L) and shall be stored in such a way as to not be toppled or damaged during transport.~~

~~**319.7 Cooking oil storage tanks.** Cooking oil storage tanks within mobile food preparation vehicles shall comply with Sections 319.7.1 through 319.7.5.2.~~

~~**319.7.1 Metallic storage tanks**. Metallic cooking oil storage tanks shall be *listed* in accordance with UL 80 or UL 142, and shall be installed in accordance with the tank manufacturer's instructions.~~

~~**319.7.2 Nonmetallic storage tanks**. Nonmetallic cooking oil storage tanks shall be installed in accordance with the tank manufacturer's instructions and shall comply with both of the following:~~

1. ~~Tanks shall be *listed* for use with cooking oil, including maximum temperature to which the tank will be exposed during use.~~
2. ~~Tank capacity shall not exceed 200 gallons (757 L) per tank.~~

~~**319.7.3 Cooking oil storage system components.** Metallic and nonmetallic cooking oil storage system components shall include, but are not limited to, piping, connections, fittings, valves, tubing, hose, pumps, vents and other related components used for the transfer of cooking oil.~~

~~**319.7.4 Design criteria**. The design, fabrication and assembly of system components shall be suitable for the working pressures, temperatures and structural stresses to be encountered by the components.~~

~~**319.7.5 Tank venting**. Normal and emergency venting shall be provided for cooking oil storage tanks.~~

~~**319.7.5.1 Normal vents**. Normal vents shall be located above the maximum normal liquid line, and shall have a minimum effective area not smaller than the largest filling or withdrawal connection. Normal vents are not required to vent to the exterior.~~

~~**319.7.5.2 Emergency vents**. Emergency relief vents shall be located above the maximum normal liquid line, and shall be in the form of a device or devices that will relieve excessive internal pressure caused by an exposure fire. For nonmetallic tanks, the emergency relief vent shall be allowed to be in the form of construction. Emergency vents are not required to discharge to the exterior.~~

319.8 LP-gas systems. Where LP-gas systems provide fuel for cooking appliances, such systems shall comply with Chapter 61 and Sections 319.8.1 through ~~319.8.5~~ 319.8.8.

319.8.1 Maximum aggregate volume. The maximum aggregate capacity of LP-gas containers transported on the vehicle and used to fuel cooking appliances only shall not exceed 200 pounds (91 kg) propane capacity.

319.8.2 Protection of container. LP-gas containers installed on the vehicle shall be securely mounted and restrained to prevent movement. LP-gas containers shall be located and secured on the exterior of the mobile food establishment, open to atmosphere or if containers are kept in compartment, said compartment must be separate from the interior food preparation area. Access must be from the exterior of the unit and compartment floor and exterior door must be vented to the atmosphere.

319.8.3 LP-gas container construction. LP-gas containers shall be manufactured in compliance with the requirements of 2020 NFPA 58.

319.8.4 Protection of system piping. LP-gas system piping, including valves and fittings, shall be adequately protected to prevent tampering, impact damage, and damage from vibration.

319.8.5 LP-gas alarms. A listed LP-gas alarm shall be installed within the vehicle in the vicinity of LP-gas system components, in accordance with the manufacturer's instructions.

319.8.6 No smoking sign. All mobile units with propane shall post a "NO SMOKING" sign next to or directly above the propane bottle and visible to the public. Such sign shall be posted with a minimum of four-inch lettering.

319.8.7 Listed hoses. Any hose used to pipe LP-gas to a device shall be listed by UL, FM, or other approved agency and listed specifically for LP Gas service. All couplings, fittings, and any other devices shall meet the requirements for LP Gas Service as outlined in the International Fuel Gas Code, NFPA 58 and 54, or be deemed unapproved and removed from service.

319.8.8 LPG tank location. LPG tanks shall be located outside the mobile food establishment a minimum of five feet from the primary means of egress.

319.9 CNG systems. Where CNG systems provide fuel for cooking appliances, such systems shall comply with Sections 319.9.1 through 319.9.4.

319.9.1 CNG containers supplying only cooking fuel. CNG containers installed solely to provide fuel for cooking purposes shall be in accordance with Sections 319.9.1.1 through 319.9.1.3

319.9.1.1 Maximum aggregate volume. The maximum aggregate capacity of CNG containers transported on the vehicle shall not exceed 1,300 pounds (590 kg) water capacity.

319.9.1.2 Protection of container. CNG containers shall be securely mounted and restrained to prevent movement. Containers shall not be installed in locations subject to a direct vehicle impact.

319.9.1.3 CNG container construction. CNG containers shall be an NGV-2 cylinder.

319.9.2 CNG containers supplying transportation and cooking fuel. Where CNG containers and systems are used to supply fuel for cooking purposes in addition to being used for transportation fuel, the installation shall be in accordance with NFPA 52.

319.9.3 Protection of system piping. CNG system piping, including valves and fittings, shall be adequately protected to prevent tampering, impact damage and damage from vibration.

319.9.4 Methane alarms. A listed methane gas alarm shall be installed within the vehicle in accordance with manufacturer's instructions.

319.10 Maintenance. Maintenance of systems on mobile food preparation vehicles shall be in accordance with Sections 319.10.1 through ~~319.10.3~~ 319.10.2.

319.10.1 Exhaust system. The exhaust system, including hood, grease-removal devices, fans, ducts and other appurtenances, shall be inspected and cleaned in accordance with Section 606.3.

319.10.2 Fire protection systems and devices. Fire protection systems and devices shall be maintained in accordance with Section 901.6.

~~**319.10.3 Fuel gas systems**. LP gas containers installed on the vehicle and fuel gas piping systems shall be inspected annually by an *approved* inspection agency or a company that is registered with the US Department of Transportation to requalify LP gas cylinders, to ensure that system components are free from damage, suitable for the intended service and not subject to leaking. CNG containers shall be inspected every 3 years in a qualified service facility. CNG containers shall not be used past their expiration date as listed on the manufacturer's container label. Upon satisfactory inspection, the approved inspection agency shall affix a tag on the fuel gas system or within the vehicle indicating the name of the inspection agency and the date of satisfactory inspection.~~

CHAPTER 3 GENERAL REQUIREMENTS is amended by adding SECTION 322 FOOD BOOTHS to read as follows:

SECTION 322
FOOD BOOTHS

322.1 Permits. For permit to operate a food booth, see Section 105.5.54. It shall be unlawful to operate a food booth without a permit.

322.2 Fire Extinguishers. A minimum of one 2A:10BC fire extinguisher shall be required for all food booths. Booths containing deep fat fryers shall have a class K portable fire extinguisher for up to four fryers having a maximum cooking medium capacity of 80 pounds each. For every additional group of four fryers having a maximum cooking capacity of 80 pounds each, an additional class K extinguisher will be required. For individual fryers exceeding 6 square feet in surface area, class K extinguishers will be installed in accordance with manufacturers' recommendations. All fire extinguishers shall have a current annual inspection sticker (within a year) issued by a *licensed* extinguisher company or provide proof that the extinguisher is new (store receipt).

322.3 Location. Food booths utilized for cooking shall have a minimum of 10 feet clearance on two sides. Booths shall not be placed in fire lanes unless otherwise approved by the fire code official. Booths shall not be placed within 10 feet of amusement rides or devices.

322.4 Cooking equipment location. Barbeque pits shall not be located within 10 feet of combustible materials. Barbeque pits shall not be located under the food booth canopy.

322.5 Acceptable cooking sources. The following are the only approved cooking sources for food booths:

1. Wood or charcoal
2. Propane
3. Natural Gas
4. Electricity

322.6 Generators. Fuel tanks shall be of adequate capacity to permit uninterrupted operation during normal operating hours. Generators shall be isolated from contact with the public. Storage of gasoline is not allowed in or near generators or food booths.

322.7 Decorations. All decorative material shall be at least six feet away from any open flame, cooking element, or heat source or be flame resistant.

322.8 Escape route. All concession stands shall have a minimum of a three ft. aisle for emergency escape.

322.9 Propane. All equipment used in conjunction with propane tanks must be UL Listed for the purposes in which they will be used. Tanks shall be secured to prevent falling. Tanks shall only be white or aluminum in color. Only one spare tank will be allowed in a food booth. Emptied propane tanks are to be removed from the site immediately after use. Regulators shall be attached to the tanks as close as possible. Leaks can be detected using a soap and water solution. Tank shutoff valves and/or additional shutoff valves shall be accessible and away from the cooking appliance(s). Propane tanks shall not be within five feet of an ignition source. Propane tanks shall not be located within 10 feet of a building door or window.

322.10 Area. A food booth shall consist of an area 10 feet by 10 feet. Extended food booths that exceed 10 feet by 10 feet space and used for cooking will be charged additional fees. These fees will be charged in one hundred square foot increments and any portion thereof.

CHAPTER 3 GENERAL REQUIREMENTS is amended by adding SECTION 323 PORTABLE OUTDOOR GAS-FIRED HEATING APPLIANCES to read as follows:

SECTION 323

PORTABLE OUTDOOR GAS-FIRED HEATING APPLIANCES.

323.1 General Requirements.

1. It shall be unlawful to operate portable outdoor gas-fired heating appliances without a permit as required by Section 105.5.55.
2. Portable outdoor gas-fired heating appliances must comply with Section 605.5 of this code.
3. One 2A:10BC fire extinguisher installed in accordance with NFPA 10 and Section 906 of this code must be provided for every 3000 square feet of area where portable outdoor gas-fired heating appliances are used. The maximum travel distance to a fire extinguisher is not to exceed 75 feet.

CHAPTER 3 GENERAL REQUIREMENTS is amended by adding SECTION 324 PARADE FLOATS to read as follows:

SECTION 324
PARADE FLOATS

324.1 Permits. For a permit to operate a Parade Float, see Section 105.5.56. It shall be unlawful to operate a Parade Float without a permit.

324.2 Decorative materials. Decorative material on parade floats shall be noncombustible or flame retardant.

324.3 Fire protection. Motorized parade floats and towing apparatus shall be provided with a minimum 2A:10BC-rated portable fire extinguisher readily accessible to the operator.

324.4 Exhaust pipes. Motorized float exhaust pipes must be extended past the exterior of the float and be clear of all decorative material.

324.5 Escape hatch. Motorized floats shall be equipped with a quick escape hatch from interior driver compartments.

SECTION 403.2 GROUP A OCCUPANCIES is amended by adding SECTION 403.2.5 EXHIBITION HALLS - GENERAL to read as follows:

403.2.5 Exhibit halls - general. The operator of premises used as a place of exhibition shall:

1. Notify each lessee of the Fire Code requirements at the time the lease is made;
2. Where required by the Fire Chief or his designee, submit to the Fire Chief or his designee, 15 days before public operation, a detailed explanation of the nature of the operation and two copies of accurately scaled floor plans which show:
    a. The exhibit layout;
    b. Aisles;
    c. Exits;
    d. Exhibits;
    e. Show decorator's booth;
    f. Location and nature of fire extinguishing equipment; and
    g. Dates when open to the public or trade.
3. Construct, operate, and maintain the exhibition in a manner satisfying this code and the approved plans.
4. Employ one or more certified fire inspector(s) of the SAFD as required and approved by the Fire Marshal, to be on duty at such place whenever, in the opinion of the Fire Marshal, it is essential for public safety.

5. A floor plan of display area must be submitted to the Fire Marshal at least 15 days prior to the event for approval.

SECTION 403.2 GROUP A OCCUPANCIES is amended by adding SECTIONS 403.2.6 SITTING OR STANDING IN AISLES PROHIBITED, 403.2.7 AUTOMOTIVE VEHICLES AND EQUIPMENT IN EXHIBIT HALLS, SECTION 403.2.8 COOKING AND FOOD-WARMING DEVICES IN EXHIBIT BOOTHS, SECTION 403.2.9 WAITING SPACES, SECTION 403.2.10 LIFE SAFETY EVALUATION , SECTION 403.2.11 EVALUATION CONTENT, SECTION 403.2.12 OUTDOOR FACILITIES , SECTION 403.2.13 GENERAL REQUIREMENTS FOR ACCESS AND EGRESS ROUTES WITHIN ASSEMBLY AREAS, SECTION 403.2.14 FLAME-RETARDANT REQUIREMENT, SECTION 403.2.15 EXHIBITS, and SECTION 403.2.16 OPEN FLAME DEVICES to read as follows:

403.2.6 Sitting or standing in aisles prohibited. The operator of premises used as a place of assembly shall prevent the sitting or standing in aisles, passageways, or stairways while the premises are occupied.

403.2.7 Automotive vehicles and equipment in exhibit halls. The operator of and exhibitors at premises used as a place of exhibition may display automotive vehicles and equipment inside a structure if:

1. The amount of fuel in the vehicle or equipment fuel tanks is limited to the greater of:
   a. The minimum amount adequate for vehicle positioning; or
   b. One quarter tank or five gallons, whichever is less
   Exception: Increase in fuel quantity is authorized with additional safeguards as *approved* by the *fire code official*.
2. Vehicle or equipment tanks are effectively locked or adequately sealed;
3. Vehicle or equipment battery cables are disconnected from the ignition systems;
4. Vehicle or equipment ignition keys are possessed at all times by a responsible person at the display location;
5. Vehicle operation is limited to brief parade type displays as specifically approved by the Fire Marshal;
6. Show vehicles with LPG tanks shall not be permitted inside the exhibit halls.

403.2.8 Cooking and food-warming devices in exhibit booths.

1. Gas-fired devices shall comply with the following:
   a. Natural gas-fired devices shall be in accordance with NFPA 54, National Fuel Gas Code, or NFPA 58, Liquefied Petroleum Gas Code.
   b. The use of LP-Gas cylinders shall be prohibited.
   c. Nonrefillable LP-Gas cylinders shall be approved for use where permitted by the authority having jurisdiction.
2. The devices shall be isolated from the public by not less than 48 in. (1220 mm) or by a barrier between the devices and the public.

3. Single-well cooking equipment using combustible oils or solids shall meet the following criteria:

    a. They shall have lids available for immediate use.

    b. They shall be limited to two ft2 (0.2 m2) of cooking surface.

    c. They shall be placed on noncombustible surface materials.

    d. They shall be separated from each other by a horizontal distance of not less than 24 in. (610 mm).

    e. They shall be kept at a horizontal distance of not less than 24 in. (610 mm) from any combustible material.

4. A portable fire extinguisher shall be provided within the booth for each device or an approved automatic extinguishing system shall be provided.

403.2.9 Waiting spaces. In theaters and other assembly occupancies where persons are admitted to the building at times when seats are not available or when the permitted occupant load has been reached and persons are allowed to wait in a lobby or similar space until seats or space is available, the following requirements shall apply:

1. Such use of a lobby or similar space shall not encroach upon the required clear width of exits.

2. The waiting spaces shall be restricted to areas other than the required means of egress.

3. Exits for waiting spaces shall be in addition to the exits specified for the main auditorium area.

403.2.10 Life safety evaluation. Where the occupant load of an assembly occupancy exceeds 6000, a life safety evaluation shall be performed. Where a life safety evaluation is required by other provisions of the Code, it shall comply with the following:

1. The life safety evaluation shall be performed by persons acceptable to the authority having jurisdiction.
2. The life safety evaluation shall include a written assessment of safety measures for conditions listed in Section 403.2.11.
3. The life safety evaluation shall be approved annually by the authority having jurisdiction and shall be updated for special or unusual conditions.

403.2.11. Evaluation content. Life safety evaluations shall include an assessment of the following conditions and the related appropriate safety measures:

1. Nature of the events and the participants and attendees

2. Access and egress movement, including crowd density problems

3. Medical emergencies

4. Fire hazards

5. Permanent and temporary structural systems
6. Severe weather conditions
7. Earthquakes
8. Civil or other disturbances
9. Hazardous materials incidents within and near the facility
10. Relationships among facility management, event participants, emergency response agencies, and others having a role in the events accommodated in the facility

403.2.12 Outdoor facilities. In outdoor facilities, where approved by the authority having jurisdiction, the number of occupants who are each provided with not less than 15 square feet (1.4 m2) of lawn surface shall be permitted to be excluded from the maximum occupant load of 6000 in determining the need for a life safety evaluation.

403.2.13 General requirements for access and egress routes within assembly areas. General requirements shall comply with 403.2.13.1 and 403.2.13.2.

403.2.13.1 Festival seating. Festival seating shall be prohibited within a building, unless otherwise permitted by the following:

1. Festival seating shall be permitted in assembly occupancies having occupant loads of 250 or less.
2. Festival seating shall be permitted in assembly occupancies where occupant loads exceed 250, provided that an approved life safety evaluation has been performed.

403.2.13.2 Access and egress routes. Access and egress routes shall be maintained so that crowd management, security, and emergency medical personnel are able to reach any individual at any time, without undue hindrance.

403.2.14 Flame-retardant requirement. Scenery and prop material construction shall comply with 403.2.14.1 through 403.2.14.3

403.2.14.1 Combustible scenery. Combustible scenery of cloth, film, vegetation (dry), and similar materials shall meet the requirements of NFPA 701, Standard Methods of Fire Tests for Flame Propagation of Textiles and Films.

403.2.14.2 Foamed plastics. Foamed plastics shall be permitted to be used only by specific approval of the authority having jurisdiction.

403.2.14.3 Scenery and props. Scenery and stage properties on thrust stages shall be of noncombustible materials, limited-combustible materials, or fire-retardant-treated wood.

403.2.15 Exhibits. Exhibits shall comply with 403.2.15.1 through 403.2.16.

403.2.15.1 Travel distance. The travel distance within the exhibit booth or exhibit enclosure to an exit access aisle shall not exceed 50 ft (15 m).

403.2.15.2 Multilevel exhibits. The upper deck of multilevel exhibits exceeding 300 ft^2 (28 m^2) shall have not less than two remote means of egress.

403.2.15.3 Construction. Exhibit booths shall be constructed of the following:

1. Noncombustible or limited-combustible materials.
2. Wood exceeding ¼ in. (6.3 mm) nominal thickness.
3. Wood that is pressure-treated, fire-retardant wood meeting the requirements of NFPA 703, Standard for Fire Retardant-Treated Wood and Fire-Retardant Coatings for Building Materials.
4. Flame-retardant materials complying with NFPA 701, Standard Methods of Fire Tests for Flame Propagation of Textiles and Films.
5. Foamed plastics and materials containing foamed plastics having a heat release rate for any single fuel package that does not exceed 100 kW, where tested in accordance with UL 1975, Standard for Fire Tests for Foamed Plastics Used for Decorative Purposes.
6. Cardboard, honeycombed paper, and other combustible materials having a heat release rate for any single fuel package that does not exceed 150 kW, where tested in accordance with UL 1975, Standard for Fire Tests for Foamed Plastics Used for Decorative Purposes.

403.2.15.4 Curtains, drapes, and decorations. Curtains, drapes, and decorations shall comply with section 807.1.

403.2.15.5 Decorative material. Acoustical and decorative material including, but not limited to, cotton, hay, paper, straw, moss, split bamboo, and wood chips shall be flame- retardant treated to the satisfaction of the authority having jurisdiction and conforming to flame-proofing requirements of the NFPA.

403.2.15.5.1 Treatment. Materials that cannot be treated for flame retardancy shall not be used.

403.2.15.5.2 Foam products. Foamed plastics, and materials containing foamed plastics and used as decorative objects such as, but not limited to, mannequins, murals, and signs, shall have a heat release rate for any single fuel package that does not exceed 150 kW where tested in accordance with UL 1975, Standard for Fire Tests for Foamed Plastics Used for Decorative Purposes.

403.2.15.5.3 Aggregate area as approved. Where the aggregate area of acoustical and decorative materials is less than 10 percent of the individual floor or wall area, such materials shall be permitted to be used subject to the approval of the authority having jurisdiction.

403.2.16 Open flame devices. Open flame devices within exhibit booths shall comply with Section 308.

SECTION 405.3 FREQUENCY is amended by adding SECTION 405.3.1 CONDUCTING FIRE DRILLS IN E OCCUPANCIES to read as follows:

405.3.1 Conducting fire drills in E occupancies. The operator of premises housing an E Occupancy shall conduct fire drills:

1. Without warning;
2. In a manner requiring:
    a. all students to immediately leave the structure upon hearing the fire drill signal;
    b. a roll call by classes outside the structure; and
    c. doors to be closed as each area is evacuated;
3. In a manner simulating fire conditions;
4. In a manner prohibiting students from running or playing;
5. If approved, in a manner permitting security persons to remain inside the structure during drills, which include:
    a. Complete checks of each section of the structure;
    b. The use of varying evacuation routes;
    c. Occasional simulation of blocked exits;
    d. Provisions for calling the fire department; and
    e. The use of varying drill times;
6. During weather which does not pose a health threat to students;
7. As an exercise in discipline and procedure, rather than speed; and
8. By pulling a manual pull station.

SECTION 405.3 FREQUENCY is amended by adding SECTION 405.3.2 FIRE DRILLS FOR E OCCUPANCIES to read as follows:

405.3.2 Fire drills for E occupancies. FIRE CHIEF'S POWER TO ORDER FIRE DRILL. The Fire Chief may require a fire drill at any E Occupancy at any time.

S E C T I O N S 407.5 HAZARDOUS MATERIALS INVENTORY STATEMENT and 407.6 HAZARDOUS MATERIALS MANAGEMENT PLAN are repealed and replaced by S E C T I O N S 407.5 HAZARDOUS MATERIALS INVENTORY STATEMENT and 407.6 HAZARDOUS MATERIALS MANAGEMENT PLAN to read as follows:

407.5 Hazardous materials inventory statement. Where required by the fire code official, each application for a permit shall include a Hazardous Materials Inventory Statement (HMIS). The HMIS shall comply with NFPA 1 annex D.

407.6 Hazardous materials management plan. Where required by the fire code official, each application for a permit shall include a Hazardous Materials Management Plan (HMMP). The HMMP shall comply with NFPA 1 annex D. The fire code official is authorized to accept a similar plan required by other regulations.

SECTION 501.3 CONSTRUCTION DOCUMENTS is amended by adding SECTION 501.3.2 SITE PLAN to read as follows:

501.3.2 Site plan. A digital copy of the Fire Protection Site Plan (labeled as such) shall be submitted with the construction documents at the time of application for a building permit. Plans must be reviewed and approved by the Fire Marshal and/or fire plan review staff prior to issuance of a building permit. The *approved* Fire Protection Site Plan will be retained by the City of San Antonio. The Fire Protection Site Plan shall show and include, but not be limited to, the following:

1. Compass reading.
2. Property and/or lot lines.
3. Street frontages.
4. Location of all buildings (existing and proposed).
5. Fire apparatus access roads (i.e., fire lanes, aerial apparatus access roads) to buildings. Fire lanes shall be highlighted and shall include dimensions (width, turning radii, clearance to overhead obstructions, etc). The plans shall also show dimensions and calculations for evaluation of compliance with Section D105.3.
6. Fences, gates, walls, streams and other obstructions to firefighter access.
7. Location of all fire hydrants (existing and proposed). This shall include the direction and the distance to all hydrants not shown on the site plan, but within one thousand feet of the building to be protected.
8. Size (diameter and length) and locations of all fire main piping (proposed and existing). The pressure class and type of new pipe to be installed shall be identified.
9. The location, type, and size of backflow prevention devices, where installed.
10. Number of lanes, including turning lanes, of all adjacent streets and the location of medians as applicable.
11. Location of all automatic sprinkler and standpipe risers.
12. Location of fire department connection(s).
13. Size, type, and location of valves including post indicator valve (if they are located in a pit), control room automatic sprinkler system shut-off, etc.
14. Other water supplies.
15. Where required, type of protection from collision that may cause physical damage to fire protection equipment.

SECTIONS 503.1.1 BUILDINGS AND FACILITIES and 503.1.1.1 ACCESS FROM ADJACENT LOT are amended to read as follows:

503.1.1 Buildings and facilities. Approved fire apparatus access roads shall be provided for every facility, building or portion of a building hereafter constructed or moved into or within the jurisdiction. The fire apparatus access road shall comply with the requirements of this section and shall extend to within 150 feet (45 720 mm) of all portions of the facility and all portions of the exterior walls of the first story of the building as measured by an approved route around the exterior of the building or facility. In sprinklered Group R-2 apartment houses, the distance may be measured through open breezeways having a minimum clear width of six feet.

Exceptions:

1. The fire code official is authorized to increase the dimension of 150 feet (45 720 mm) where any of the following conditions occur:

    a. The building is equipped throughout with an approved automatic sprinkler system installed in accordance with Section 903.3.1.1, 903.3.1.2 or 903.3.1.3. The dimension shall be increased from 150 feet to 200 feet. This increase shall not be applicable to Groups H and I Occupancies, buildings with occupancies having High-Piled Combustible Storage and high-rise buildings.

    b. Fire apparatus access roads cannot be installed because of location on property, topography, waterways, nonnegotiable grades or other similar conditions, and an approved alternative means of fire protection is provided.

    c. There are not more than two Group R-3 or Group U occupancies.

    d. The building is a non-combustible Group S-2 open parking garage meeting the requirements of the 2021 International Building Code Section 406.3, with or without a sprinkler system. The increase shall be allowed to be up to 200 feet.

2. Where approved by the fire code official, fire apparatus access roads shall be permitted to be exempted or modified for solar photovoltaic power generation facilities.

503.1.1.1 Access from adjacent lot. Where fire apparatus access roads for a building or buildings are provided from an adjacent lot, a fire lane easement or ingress/egress easement is required to be recorded on the adjacent lot's plat that is providing the common access. The adjacent lot's plat is to clearly show the easement graphically.

Exception: In lieu of the graphical easement, a note may be placed on the plat that, at a minimum, states, the following: "Ingress and egress shall be provided between all adjacent lots for adequate fire department vehicle access per the City of San Antonio Fire Code. The cross access shall not be blocked, nor may this note be taken off the plat without written permission from the City of San Antonio Director of Development Services and the San Antonio Fire Department Fire Marshal."

SECTION 503.2.1 DIMENSIONS is amended by adding SECTIONS 503.2.1.1 DIVIDED ENTRANCE TO PROPERTY and 503.2.1.2 MOUNTABLE CURBS to read as follows:

503.2.1.1 Divided entrance to property. When guard houses, security stations, median, landscape islands or other similar use obstructions are so located as to create a one-way and partially obstruct the entrance(s) to a property or fire lane(s) in any location, such one way(s) shall be a minimum of fourteen

feet clear on each side of the obstruction. This minimum requirement is only applicable at the point(s) of obstruction and is not permitted along required aerial apparatus access roads, fire apparatus access roads adjacent to fire hydrants or fire department connections, or at any location where a fire apparatus vehicle is expected to be positioned for the duration of the fire event. Turning radii shall be permitted in accordance with Section 503.2.4.

503.2.1.2 Mountable curbs. Mountable curbs are permitted when *approved* by the Fire Marshal.

SECTION 503.2.3 SURFACE is amended to read as follows:

503.2.3 Surface. Fire apparatus access roads shall be designed and maintained to support the imposed loads of fire apparatus and shall be surfaced so as to provide all-weather driving capabilities.

Drivable grass surfaces, or other alternative drivable surfaces, are permitted when approved by the Fire Marshal or his designee and in accordance with all of the following conditions:

1. Sealed documents indicating compliance with the provisions of 503.2.3 shall be submitted by a registered design professional for review.
2. The drivable grass surface, or alternative drivable surface, shall not be used as the primary access to the site.
3. The surface shall be capable of supporting the imposed load of fire apparatus weighing at least 75,000 pounds.
4. Blue traffic reflectors shall be provided on each side of the surface every 20 feet to clearly mark its boundaries. Vegetation on and surrounding the surface shall be maintained such that said reflectors are visible at all times.
5. Sod is not permitted to be placed over the drivable base,
6. If the surface proposed is to be used as the aerial apparatus access road for the facility, concrete curbing, or other approved edging, shall be installed along both sides of the portion to be used as such for enhanced lateral stability.
7. If sand or other free-flowing fill is used as a main structural component for the surface, concrete curbing or other approved edging shall be installed along both sides of the surface for material containment.
8. The surface shall be maintained in proper working order at all times when utilized as a required fire lane. Should the surface become damaged or fall into disrepair, the Fire Marshal or his designee shall be authorized to require the repair and re- certification of said surface.

SECTION 503.2.4 TURNING RADIUS is amended to read as follows:

503.2.4 Turning radius. The required turning radius of a fire apparatus access road shall be determined by the fire code official.

The turning radii of a fire apparatus access roadway shall require a minimum of 50 feet outside radius and a minimum of 25 feet clear distance to the inside radius on all turns in excess of 30 degrees.

SECTION 503.2.5 DEAD ENDS is amended to read as follows:

503.2.5 Dead ends. Dead-end fire apparatus access roads in excess of 150 feet (45 720 mm) in length shall be provided with an approved area for turning around fire apparatus. Turn arounds approved by the Fire Marshal or as permitted by Appendix D are acceptable.

Exception: Where the building is equipped throughout with an approved sprinkler system in accordance with Section 903.3.1.1, 903.3.1.2, or 903.3.1.3, the maximum length of dead-end fire apparatus access roads shall be increased to 200 feet. This increase shall not be applicable to Groups H and I Occupancies, buildings with occupancies having High-Piled Combustible Storage, and high-rise buildings. This increase shall apply to all non- combustible Group S-2 open parking garages meeting the requirements of the 2021 International Building Code Section 406.3, with or without a sprinkler system.

SECTION 503.2.7 GRADE is repealed and replaced with SECTION 503.2.7 GRADE to read as follows:

503.2.7 Grade. The gradient for a fire apparatus access road shall not exceed 12%.

SECTION 503.3 MARKING is repealed and replaced by SECTION 503.3 MARKING to read as follows:

503.3 Marking. Upon the designation of a fire lane pursuant to this ordinance, the Fire Marshal shall give notice of such designation to the owner of such designated premise, directing the owner to cause signs to be posted at the expense of the owner at designated locations stating: "Fire Lane - No Parking at any Time City Ord. 54547." Such signs shall be of standard size and color, of standard lettering and mounting, conforming to specifications established by the Director of Public Works. In addition to the signs, the owners of such designated premises at their option, or, if so directed by the Fire Marshal, shall paint all fire lane curbs red with white- stenciled letters stating, "Fire Lane, No Parking". Lettering for the curbs shall use 4-inch lettering with a distance of not more than 40 feet between wording. It shall be unlawful to park any vehicle other than an authorized emergency vehicle in a designated fire lane when such signs are in place, or such red curbing exists. In areas where the fire lane may not be clearly defined, the Fire Marshal may require a 4-inch red stripe be painted that defines the boundaries of the fire lane.

SECTION 503.4.1 TRAFFIC CALMING DEVICES is repealed.

SECTION 503.6 SECURITY GATES is amended to read as follows:

503.6 Security gates. The installation of security gates across a fire apparatus access road shall be approved by the fire ~~code official~~ marshal. Where security gates are installed, they shall have an approved means of emergency operation to include a fire department specific key switch, lock, or box. Upon loss of power to electric gate operators, a secondary power source or clearly marked and identified manual release shall be provided. The security gates and the emergency operation shall be maintained operational at all times. Electric gate operators, where provided, shall be listed in accordance with UL 325. Gates intended for automatic operation shall be designed, constructed and installed to comply with the requirements of ASTM F 2200.

503.6.1 Direction of swing. Security gates installed across a Fire Apparatus Access Road shall swing in the direction of travel towards the building or open horizontally to avoid backing up of Fire Apparatus and to allow for an expedited response.

SECTION 503 FIRE APPARATUS ACCESS ROADS is amended by adding SECTIONS 503.7 FIRE MARSHAL AUTHORITY TO DESIGNATE FIRE LANES, 503.8 SUMMONS TO BE ISSUED FOR PARKING VIOLATION, 503.9 REMOVAL OF VEHICLE BY PROPERTY OWNER, 503.10 REMOVAL OF VEHICLE BY FIRE CHIEF, and 503.11 ABANDONMENT OF FIRE LANE to read as follows:

503.7 Fire marshal authority to designate fire lanes. The Fire Marshal is hereby authorized to designate fire lanes on designated premises where such areas must be free of parked vehicles and other obstructions to provide ready access to buildings therein, in case of fire or other emergencies. The Fire Marshal's designation of such fire lanes does not obviate the owner of such property of their responsibility to maintain the area. Further, owners of the private property or their designated representative may request that additional fire lanes be designated by the Fire Marshal.

503.8 Summons to be issued for parking violation. A summons or notice to appear in answer to a charge of parking in violation of this section specifying the location of the fire lane in which such violation occurred and the date and time of such violation, may be issued by any police officer or any member of the Arson Investigating unit or inspectors in the Fire Prevention Bureau of the Fire Department.

503.9 Removal of vehicle by property owner. Except an authorized emergency vehicle, the owner of private property, or their agent, may have any motor vehicle that is parked in a legally designated fire lane removed and stored at either their own expense or that of the vehicle operator.

The owner of the premises, or their agent, who has a vehicle removed and stored, is not liable for damages incurred as a result of removal or storage, if the vehicle is removed by a vehicle wrecker service insured against liability for property damage incurred in towing vehicles and is stored by a storage company insured against liability for property damage incurred in the storage of vehicles.

503.10 Removal of vehicle by fire chief. Any vehicle parked in any designated fire lane may be removed at the vehicle owners' expense upon the authorization of the Fire Chief under the following conditions:

1. When the vehicle violates City Ordinance 54547 (Fire Lanes) by parking in a fire lane, or
2. When a vehicle blocks the ingress/egress of a business, theater, night club, apartment complex, gymnasium or a place of assembly, or
3. When a vehicle's presence threatens the life safety of the public by impeding the ability of the fire apparatus and emergency medical equipment to respond to an emergency.

The Fire Chief shall cause such vehicle to be removed by the towing service operating under a contract with the city and shall further cause such vehicle to be impounded in one of the Police Department Vehicle Storage sections.

503.11 Abandonment of fire lane. No owner, manager or person in charge of any premises served by a required fire lane shall abandon or close any such fire lane without the written permission from the Fire Marshal.

SECTION 504.1 REQUIRED ACCESS is amended by adding SECTION 504.1.1 FIREFIGHTER PERSONNEL ACCESS to read as follows:

504.1.1 Firefighter personnel access. A minimum width of five (5) feet of clear space shall be provided to allow for firefighter personnel to access the building from all sides of the exterior.

SECTION 505.1 ADDRESS IDENTIFICATION is repealed and replaced with SECTION 505.1 ADDRESS INDENTIFICATION to read as follows:

505.1 Address identification. New and existing buildings shall have approved address numbers, building numbers or approved building identification. The address identification shall be legible and placed in a position that is visible from the street or road fronting the property. Address identification characters shall contrast with their background. Address numbers shall be Arabic numbers or alphabetical letters. Numbers shall not be spelled out. Address characters shall be a minimum of 6 inches (102 mm) high with a minimum stroke width of 0.5 inch (12.7 mm). For buildings with individual suites, the suite numbers shall be a minimum of 4 inches high with a minimum stroke width of 0.5 inches. 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 cannot be viewed from the public way, a monument, pole or other sign or means shall be used to identify the structure. Address numbers shall be maintained.

SECTION 505 PREMISES IDENTIFICATION is amended to add sections 505.3 MULTI-BUILDING COMPLEXES, 505.3.1 MULTI-ADDRESS COMPLEXES, 505.4 MALL LEASE SPACES, and 505.5 TENANT IDENTIFICATION to read as follows:

505.3 Multi-building complexes. Office, industrial and apartment complexes shall be identified by name and number on a site map at the main entry roadway to identify the location of each building in the complex.

> **505.3.1 Multi-address complexes**. Office and industrial complexes with multiple addresses contained within shall post all addresses so that they are visible from roadway.

505.4 Mall lease spaces. Each mall lease space shall be identified by a uniform size number at a uniform easily visible location in proximity to exterior and mall entrance doors.

505.5 Tenant identification. Each occupied tenant space provided with a secondary exit to the exterior or exit *corridor* shall be provided with tenant identification by business name and address. Letters and numbers shall be posted on the *corridor* side of the door, be plainly legible and shall contrast with their background.

Exception: Tenant identification is not required for anchor stores.

SECTION 506 KEY BOXES is amended to add SECTIONS 506.2.1 KEY BOX ACCESS AND REMOVAL OF KEYS and 506.3 KEY BOX LOCATION AND CONTENTS to read as follows:

> **506.2.1 Key box access and removal of keys**. The Fire Department shall have the only key to the key box. Removal of any key by other than the authorized Fire Department personnel shall be a violation of this Code.

506.3 Key box location and contents. Required key boxes shall be located as follows and as approved by the Fire Marshal:

1. Within 12 feet of the emergency elevators and visible from the entrance to the emergency elevator; or

2. Between 8 and 10 feet to the side of the main entrance level to the building and between 8 to 10 feet from the grade where practical, or as approved by the Fire Marshal.

The key box shall contain designated keys essential to emergency operations including, but not limited to, the following:

1. Elevator keys capable of accessing all floors in the building
2. Stairway keys
3. Fire control station keys
4. Alarm System keys

SECTION 507.3 FIRE FLOW is repealed and replaced with SECTION 507.3.1 FIRE FLOW FOR RURAL ISOLATED AREAS to read as follows:

507.3 Fire flow. Fire Flow requirements for buildings or portions of buildings and facilities shall be as per Appendix B of the International Fire Code or other *approved* method as determined by the Fire Marshal. When utilizing Table C105.1 to determine number and distribution of fire hydrants, and the flow requirement falls between the values on the table, the flow requirement shall be rounded up to meet the higher value.

507.3.1 Fire flow for rural isolated areas. The fire flow requirements for rural, isolated structures may be determined as follows. The Fire Marshal may modify the fire flow requirements for small isolated buildings or light hazard occupancies (as defined in the 2019 Edition of NFPA 13, referenced in Chapter 80) under the following conditions:

1. The building is fully protected with an approved automatic fire sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2;
2. The automatic sprinkler system demand, including hose stream demand is provided;
3. The building is located in a subdivision area considered by the Code Official to be in a rural setting;
4. Provision of a fully compliant water supply is a severe economic burden;
5. A minimum of 60 foot yard is provided between the buildings and property lines (dedicated right-of-way may be used to obtain clear distance); and
6. When the Fire Code required fire flow is available at the property line, the owner shall connect to the water supply system and provide on-site fire hydrants and water supply as is otherwise required by the Code.

SECTION 507.4 WATER SUPPLY TEST is repealed and replaced with SECTION 507.4 WATER SUPPLY TEST to read as follows:

507.4 Water supply test. Adequacy of the water supply shall be determined by an approved flow test that is conducted on the fire hydrants nearest the project site unless otherwise approved by the Code Official. The flow test shall be as follows:

1. The flow test shall have been conducted no more than 12 months prior to the date of construction document submittal to the City of San Antonio.
2. The flow test shall be conducted in accordance with NFPA 291, Recommended Practice for Fire Flow Testing and Marking of Hydrants and any other applicable local, state, or national standards and/or requirements.
3. The flow test results shall be submitted with the construction documents in accordance with the COSA standard fire flow test format.
4. If the water supply piping is not yet constructed, hydraulic calculations for the proposed piping design shall be submitted. The calculations shall be based on the flow test conducted on the fire hydrants nearest the project site and shall verify that the piping design provides the minimum require fire flow at no less than 25 psi residual. Upon completion of construction and prior to final certificate of occupancy, a flow test shall be conducted to verify the results of the calculations.

SECTION 507.5.1 WHERE REQUIRED is repealed and replaced with SECTION 507.5.1 WHERE REQUIRED to read as follows:

507.5.1 Where required. Public and/or private fire hydrants are required to be installed where one or more of the following conditions exist:

1. Existing fire hydrants do not meet the required fire hydrant location and spacing criteria defined in Section 507.5.1.1, 507.5.1.2, or Appendix C.
2. The complexity of the project justifies their installation as determined by the Fire Marshal.

SECTION 507.5.1.1 HYDRANT FOR STANDPIPE SYSTEMS is repealed and replaced with SECTION 507.5.1.1 FIRE HYDRANT LOCATION AND SPACING FOR NON-SINGLE-FAMILY DEVELOPMENTS to read as follows:

507.5.1.1 Fire hydrant location and spacing for non-single-family developments. Sufficient fire hydrants shall be considered to be provided for a building when:

1. Not more than 500 feet of hose will be required to reach from a fire hydrant to all exterior portions of the first floor of the structures in question; and

   Exception: Where the building is equipped throughout with an approved sprinkler system installed in accordance with Section 903.3.1.1, 903.3.1.2, or 903.3.1.3, the maximum distance from hydrants to all exterior portions of the building shall be increased to 750 feet as the hose lays. This increase shall not be applicable to Groups H and I Occupancies, buildings with occupancies having High-Piled Combustible Storage and high-rise buildings. This increase shall apply to all non- combustible Group S-2 open parking garages meeting the requirements of the 2021 International Building Code, Section 406.3, with or without a sprinkler system.

2. All fire hydrants required as prescribed by Appendix C shall be within 500 feet of a point on the building being protected and said distance is measured per the hose lay criteria in Section 507.5.1.2.

   Exception: Where the building is equipped throughout with an approved sprinkler system installed in accordance with Section 903.3.1.1, 903.3.1.2, or 903.3.1.3, the maximum distance from hydrants to a point on the building shall be increased to 750 feet as the hose lays. This increase shall not be applicable to Groups H and I Occupancies, buildings with occupancies having High-Piled Combustible Storage and high-rise buildings. This increase shall apply to all non-combustible Group S- 2 open parking garages meeting the requirements of the 2021 International Building Code Section 406.3, with or without a sprinkler system.

SECTION 507.5.1 WHERE REQUIRED is amended by adding SECTION 507.5.1.2 FIRE HYDRANT LOCATION AND SPACIGN to read as follows:

507.5.1.2 Fire hydrant location and spacing. Fire hydrants shall be located and spaced per the following criteria:

1. Hose lay is measured along public streets, fire lanes, and access roadways for Fire Department vehicles. This hose lay consists of 350 feet of supply line as deployed by truck, and 150 feet of hose deployed by hand. Unless otherwise increased in this Code, where the building is equipped throughout with an approved sprinkler system installed in accordance with Section 903.3.1.1, 903.3.1.2, or 903.3.1.3, the maximum distance from hydrants to a point on the building shall be increased to 750 feet as the hose lays with 550-foot hose lay by the truck and 200-foot hose lay by hand.

2. No fire flow credit is allowed for hydrants which are so obstructed as to make their use impractical, such as, but not limited to, hydrants across main line railroad tracks that are in heavy use or across limited access highway, expressways, primary thoroughfares, across streams, or walls. Hydrants requiring fire apparatus to drive against oncoming traffic to supply water for fire protection and not in the normal direction of travel on one-way streets or highway access roads shall be considered obstructed unless *approved* by the *fire code official*.

3. Hydrants required by this code along both public and private water mains shall be spaced no closer than 300 feet with spacing between hydrants not to exceed 600 feet. Additional non-required hydrants may be spaced no closer than 200 feet from required hydrants unless *approved* by the *fire code official*.

4. Fire hydrants shall be located along the public right-of-way or along the Fire Department access roadways, preferably at intersections or on islands separating parking areas which cannot be obstructed by parked vehicles. Hydrants in areas subject to physical damage shall be protected from collision. Fire hydrants across more than four lanes of traffic (including turning lanes) or across medians are not considered accessible.

5. Where existing or proposed fire line(s) and/or existing or proposed fire hydrant(s) are to be used to meet the requirements of this Code and are provided from an adjacent lot, said appurtenances shall be provided with a dedicated water easement. The easement is required to be recorded on the adjacent lot's plat that is proposing the shared access. The adjacent lot's plat is to clearly show the water easement graphically. Recordation by legal instrument alone is not approved by the Fire Marshal.

SECTION 507.5.3 PRIVATE FIRE SERVICE MAINS AND WATER TANKS is amended by adding SECTION 507.5.3.1 PRIVATE FIRE SERVICE MAIN to read as follows:

507.5.3.1 Private fire service main. Private fire mains as used in this Code are the pipe and its appurtenances on private property between San Antonio Water System, other public water system, or other sources of water and the base elbow of private fire hydrants or the rise for automatic sprinkler or standpipe systems. When connected to a public water system, the private fire main begins at a point designated by the public water utility. When connected to a gravity tank or pressure tank, the private fire main begins at the inlet side of the tank check valve.

SECTION 507.5.5 CLEAR SPACE AROUND HYDRANTS is amended to read as follows:

507.5.5 Clear space around hydrants. A 3-foot (914 mm) clear space shall be maintained around the circumference of fire hydrants, except as otherwise required or approved. The clear space around hydrant and the access to the hydrant shall be no more than eight percent slope.

SECTION 507.5 FIRE HYDRANT SYSTEMS is amended by adding SECTIONS 507.5.7 DESIGN CRITERIA FOR WATER MAINS and 507.5.8 FIRE HYDRANT INSTALLATION CRITERIA to read as follows:

507.5.7 Design criteria for water mains.

1. Where the fire service mains are used to supply required fire hydrants, the mains shall be sized to flow the required fire flow as determined by Section 507.3.

2. Where the fire service mains are used to supply required fire hydrants plus fire sprinkler and/or fire standpipe systems, the mains shall be sized to flow the larger of the fire hydrant flow demand as determined by Section 507.3, the fire sprinkler demand as determined by Section 903.3 or the fire standpipe demand as determined by Section 905.2.

3. The required number of fire hydrants for the fire flow determined by Section 507.3 shall be specified in Appendix C, Table C105.1.

4. When sizing the fire service main, the distribution of the fire flow among the required fire hydrants (as determined by item no. 1 or 2 above) shall be as determined by the Fire Marshal, but in most cases shall have no less than 1,000 gpm at the hydraulically remote fire hydrant with the remaining fire flow equally distributed among the remaining required fire hydrants.
5. Main Size:
    5.1. Minimum diameter for public water mains shall be six inches in single-family residential areas and eight inches in all other areas. Larger mains may be required to accommodate fire flow requirements.

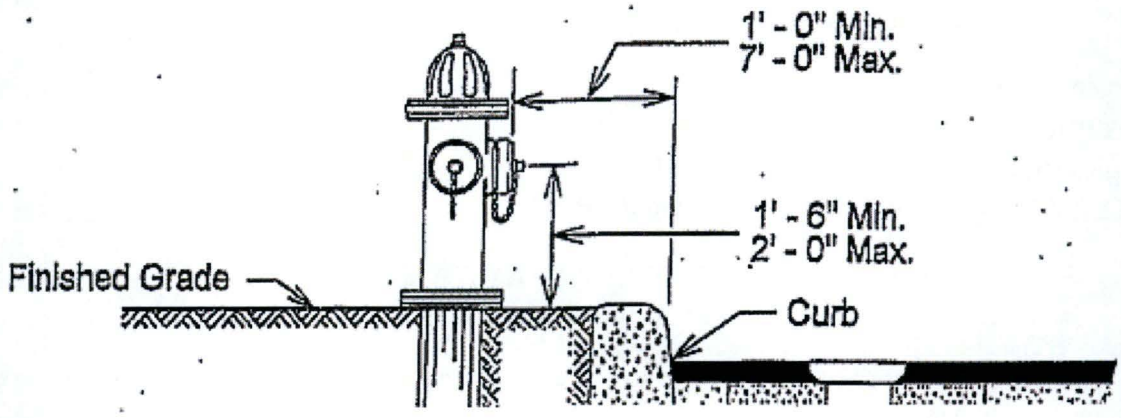
    5.2. Private fire mains shall be hydraulically calculated.

6. Water pressure in private fire mains shall not be less than thirty-five pounds per square inch (35 psi) with no hydrants in use. When hydrants are in use supplying the required fire flow, water pressure in the main at the fire hydrant discharge level shall be not less than 25 pounds per square inch (25 psi) residual.

7. Except for specific requirements of this code, all hydrants and mains required for private protection shall be designed, constructed, and operated in conformance with the local water purveyor's criteria, specifications and regulations for public fire hydrants and mains on public streets and NFPA 24.

507.5.8 Fire hydrant installation criteria. Fire hydrants shall be installed per the following criteria:

1. Fire hydrants shall be a minimum of one foot and a maximum of seven feet from the gutter face of the curb which forms a public way or Fire Lane. Fire hydrants in parking lots adjacent to a Fire Lane or public way shall meet the same requirement for distance and be located on a curbed island or protected by bollards.
2. The steamer (pumper) connection shall be a minimum of one and one-half feet and a maximum of two feet above grade.
3. All private hydrants shall be painted red.
4. Fire hydrants shall be right turn only.
5. The steamer (pumper) connection shall face the street, fire access road or fire lane.
6. The steamer (pumper) connection shall have a nominal inside diameter of 4 inches.
7. Hydrants shall have two other hose connections with a nominal inside diameter of 2.5 inches in addition to the steamer (pumper) connection.
8. Hydrants, public or private, shall be located not less than 40 feet from the building to be protected.



SECTION 509.1 IDENTIFICATION is amended to read as follows:

509.1 Identification. Fire protection equipment shall be identified in an approved manner. Rooms containing controls for air-conditioning systems or fire protection systems shall be identified for the use of the fire department. Signs utilizing symbols shall have white reflective symbols on red background per guidelines found in NFPA 170. Signs shall be a minimum size of 4 inches by 6 inches, red background with white lettering with letters a minimum of .05 inch letter stroke. Approved signs required to identify fire protection equipment and equipment location shall be constructed of durable materials, permanently installed and readily visible. For exterior signs, heavy-gauge, sign-grade aluminum shall be used. Interior signs shall be constructed of rigid plastic, light-gauge aluminum or other approved, durable, water- resistant material.

SECTION 510.1 EMERGENCY RESPONDER COMMUNICATION COVERAGE IN NEW BUILDINGS is amended to read as follows:

510.1 Emergency responder communication coverage in new buildings. Approved in- building, two-way emergency responder communication coverage for emergency responders shall be provided in all new buildings. ~~In building, two-way emergency responder communication coverage within the building shall be based on the existing coverage levels of the public safety communication systems utilized by the jurisdiction. This section shall not require improvement of the existing public safety communication systems~~.

Exceptions:

~~1. Where *approved* by the building code official and the *fire code official*, a wired communication system in accordance with Section 907.2.13.2 shall be permitted to be installed or maintained instead of an *approved* radio coverage system.~~

~~2. Where it is determined by the *fire code official* that the radio coverage system is not needed.~~

~~3. In facilities where emergency responder radio coverage is required, and such systems, components or equipment required could have a negative impact on the normal operations of that facility, the *fire code official* shall have the authority to accept an automatically activated emergency responder radio coverage system.~~

Except as otherwise provided, no person shall erect, construct, modify or cause any building, structure or any part thereof, causing the failure to support adequate radio coverage for City of San Antonio public safety services to include, but not limited to, police, fire, and public works department. A certificate of occupancy may not be issued for any building or structure which fails to comply with this requirement.

510.1.1 Exemptions. This section shall not apply to any building less than 50,000 square feet or any building less than four stories with less than 50,000 square feet per floor.

510.1.2 Failure to comply. Failure to comply with this code shall be grounds for the Director of Development Services to revoke any previously issued Certificate of Occupancy for the building or structure. A written appeal may be taken to the Building-related and Fire Codes Appeals and Advisory Board regarding the revocation of the Certificate of Occupancy.

SECTION 510.2 EMERGENCY RESPONDER COMMUNICATION COVERAGE IN EXISTING BUILDINGS is amended to read as follows:

510.2 Needs assessment survey. A needs assessment survey to determine if the installation of an in-building two-way radio enhancement system for in-building emergency responder communications coverage shall be completed based on the criteria set forth in Section 510.1 through 510.5. The needs assessment survey shall not be completed without prior coordination and approval of the radio licensing authority and AHJ, shall be submitted in an acceptable format and shall comply with the following:

1. In addition to the requirements set forth in Section 510.1, a needs assessment survey shall always be conducted for any building with one or more basements or below-grade levels, to include any underground parking facilities and structures.

2. Surveys shall be conducted utilizing industry standard, calibrated test equipment to perform on-site spectrum analysis of radio signal levels. Documentation of equipment calibration shall be provided with the test report package. Each floor should be divided into 20 equal test grids.

3. Measurements should be taken at the center of each test grid or as close to the center as possible.

4. Critical areas must be designated on the floor plan and included in the survey are fire command centers, fire pump rooms, exit stairwells, exit passageways, elevator lobbies, standpipe cabinets, and sprinkler sectional valve locations.

5. For projects where the scope includes the building shell only all exterior finish materials (cladding, brickwork, veneer), all roofing materials, glazing, interior finish materials for the shell stage (drywall, wood paneling, flooring and custom finishes) shall be installed to include weather sealing of all glazing, prior to the site survey being conducted. Additionally, all exterior doors shall be closed.

6. For projects where the scope includes building shell and interior tenant finish out, all of the requirements for shell stage shall apply with the addition of all interior walls, doors and partitions being installed. Where such walls, doors and partitions include glazing, the installation of such glazing shall be complete to include any required sealing. Additionally, any doors specified with seals and / or sweeps shall have said seals and / or sweeps installed prior to the site survey being conducted.

7. For storage occupancy projects that require installation of rack systems for storage of materials and/or products, all survey requirements for shell and finish out stages shall apply and all rack storage equipment shall be installed prior to any survey being conducted.

8. An acceptable survey shall yield a minimum signal strength inbound and outbound of - 95dBm and Delivered Audio Quality (DAQ) of 3.0.

9. Survey results shall be submitted to the *fire code official* for review and approval.

10. A construction permit is required for all emergency responder radio communication coverage system installation.

510.2.1 Retroactive requirements. In the event it is determined that installation of an Emergency Responder Radio Coverage System (ERRCS) is required, all existing buildings which meet the criteria set forth by the currently adopted code and local amendments will be granted a three (3) year period to provide an approved in-building, two-way emergency responder communication coverage as required in Chapter 11. The three (3) year period begins upon Owner or Occupant being notified of requirement.

SECTION 510.4.2.5 SYSTEM MONITORING is amended to read as follows:

510.4.2.5 System monitoring. The in-building, two-way emergency responder communication coverage system shall be monitored by a listed fire alarm control unit, or where approved by the fire code official, shall sound an audible signal at a constantly attended on-site location. Automatic supervisory signals shall include the following:

1. Loss of normal AC power supply.

2. System battery charger(s) failure.

3. Malfunction of the donor antenna(s).

4. Failure of active RF-emitting device(s).
5. Low-battery capacity at 70-percent reduction of operating capacity.
6. Failure of critical system components.
7. The communications link between the fire alarm system and the in-building, two- way emergency responder communication coverage system.
8. Oscillation of active RF-emitting device(s).
9. For buildings equipped with a fire command center, the fire command center shall be equipped with a dedicated annunciator which provides the status of all RF- emitting devices, the location(s) of all active system components and provides visual and labeled indicators for all critical system components to include RF- emitting device(s).

SECTION 605.4 FUEL OIL STORAGE SYSTEMS is amended to read as follows:

605.4 Fuel oil storage systems. Fuel oil storage systems for building heating systems shall be installed and maintained in accordance with this code. Tanks and fuel-oil piping systems shall be installed in accordance with ~~Chapter 13 of~~ the International Mechanical Code. Above ground storage tanks and piping for generators shall comply with Chapter 57.

SECTION 607 COMMERCIAL COOKING OIL STORAGE is repealed.

SECTION 901.4 FIRE PROTECTION AND LIFE SAFETY SYSTEMS is amended by adding SECTION 901.4.8 FIRE MAINS to read as follows:

901.4.8 Fire Mains. Fire service mains bedding, backfill/initial backfilling for concrete steel cylinder pipe (CSC), ductile iron pipe (DI), and polyvinyl chloride pipe (PVC) in all nominal diameters shall be composed of sand, well graded crushed stone or gravel conforming to the following requirements unless modified by the engineer:

MODIFIED GRADE 5	PERCENT
Retained on ½" sieve	0%
Retained on 3/8" sieve	0—5%
Retained on No. 4 sieve	20—80%
Retained on No. 10 sieve	75—100%
Retained on No. 20 sieve	98—100%

The backfill shall be installed prior to the inspection with the joints left exposed.

SECTION 901.5 INSTALLATION ACCEPTANCE TESTING is amended to read as follows:

901.5 Installation Acceptance Testing. Fire protection and life safety systems and appurtenances thereto shall be subject to acceptance tests as contained in the installation standards and as approved by the fire code official. The fire code official shall be notified before any required acceptance testing. A representative of the Fire Marshal shall witness all required acceptance tests for all these systems.

901.5.1 Occupancy. It shall be unlawful to occupy any portion of a building or structure until the required fire protection and life safety systems have been tested and approved.

SECTIONS 901.6.2.1 HIGH-RISE BUILDINGS and 901.6.2.2 SMOKE CONTROL SYSTEMS are amended to read as follows:

901.6.2.1 High-rise buildings. For high-rise buildings, an integrated testing plan shall ~~comply with NFPA 4~~ be 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.

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 901.6.4 MAINTENANCE AGREEMENT to read as follows:

901.6.4 Maintenance Agreement. A maintenance agreement, as defined by Section 202, with a licensed fire protection company shall be provided to the Fire Marshal for each fire protection system at all times. Proof of a maintenance agreement shall be provided during any system acceptance test. Agreements for testing and inspection only as defined by Section 202 shall not be credited with having met this requirement.

SECTION 901.7 SYSTEMS OUT OF SERVICE is amended to read as follows:

901.7 Systems out of service. Where a required fire protection system is out of service, the fire department and the fire code official shall be notified immediately and, where required by the fire code

official, the building shall either be evacuated or an approved fire watch shall be provided for all occupants left unprotected by the shutdown until the fire protection system has been returned to service.

~~Where utilized, fire watches shall be provided with not less than one approved means for notification of the fire department and their only duty shall be to perform constant patrols of the protected premises and keep watch for fires.~~

Exception: Facilities with an approved notification and impairment management program. The notification and impairment program for water-based fire protection systems shall comply with NFPA 25.

A fire watch will be performed at all times that a system is taken out of service. Except for emergencies, the fire code official shall be given 72 hours' notice before a system is voluntarily taken out of service. When, at the discretion of the Fire Chief or his designee, there is a life safety issue, uniformed employees of the San Antonio Fire Department or other fire watch personnel as approved by the Fire Chief or his designee shall perform a fire watch. Fire watch personnel shall be provided with at least one approved means for notification to the fire department dispatch and their sole duty shall be to perform constant patrols and watch for safety hazards and occurrences of fire. The cost of the fire watch shall be at the current overtime rate for fire inspections and shall be the sole responsibility of the owner/contractor to pay. The fire watch fee shall be paid to the City of San Antonio before final approval is granted on system work.

SECTION 903.1 GENERAL is amended by adding SECTION 903.1.2 SAFETY FACTOR to read as follows:

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 903.2 WHERE REQUIRED is amended to read as follows:

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~~ 903.2.13. Where existing open buildings and structures are modified such that they are no longer open on at least three sides and open to a minimum of 50% of the perimeter of the area covered, fire sprinkler 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.

Exception: Spaces or areas in telecommunications buildings used exclusively for telecommunications equipment, associated electrical power distribution equipment, batteries and standby engines, provided that those spaces or areas are equipped throughout with an automatic smoke detection system in accordance with Section 907.2 and are separated from the remainder of the building by not less than 1-hour fire barriers constructed in accordance with Section 707 of the International Building Code or not less than 2-hour horizontal assemblies constructed in accordance with Section 711 of the International Building Code, or both.

SECTION 903.2.1 GROUP A is amended to read as follows:

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 903.2.1.5.

Exception: A one-story detached open pavilion consisting of a 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 ft ^{2} 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 to read as follows:

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 m ^{2}).
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 903.2.6 GROUP I is amended to read as follows:

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 I-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 903.2.8 GROUP R is amended to read as follows:

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 HOME as defined in Section 202 General Definitions.

SECTION 903.2.11.1.1 OPENING DIMENSIONS AND ACCESS is repealed and replaced with SECTION 903.2.1.1.1 OPENING DIMENSIONS AND ACCESS to read as follows:

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

SECTION 903.2 WHERE REQUIRED is amended by adding SECTION 903.2.13 PORTE COCHERES to read as follows:

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

Exceptions: Porte-cocheres of non-combustible construction under 1000 square feet.

SECTION 903.3.1.1.1 EXEMPT LOCATIONS is amended to read follows:

903.3.1.1.1 Exempt locations. Automatic sprinklers shall not be required in the following rooms or areas where such rooms or area 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.

1. Any room where the application of water, or flame and water, constitutes a serious life or fire hazard.
2. Any room or space where sprinklers are considered undesirable because of the nature of the contents, when approved by the fire code official.
3. Generator and transformer rooms separated from the remainder of the building by walls and floor/ceiling or roof/ceiling assemblies having a fire resistance rating of not less than 2 hours.

4. Rooms or areas that are of noncombustible construction with wholly noncombustible contents.
5. Fire service access elevator machine rooms and machinery spaces.
6. Machine rooms and machinery spaces associated with occupant evacuation elevators designed in accordance with Section 3008 of the International Building Code.
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 903.3.1.02.3 ATTICS is amended to read as follows:

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 of the International Building Code, 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 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 of the International Building Code.
   ~~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.
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 of the International Building Code.
   ~~4.5 Fill the attic with noncombustible insulation.~~

SECTION 903 AUTOMATIC SPRINKLER SYSTEMS is amended to add SECTION 903.1.2.4. ELEVATOR MACHINE ROOM, to read as follows:

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 ~~as~~ per NFPA 13 standards.

SECTION 903.4 SPRINKLER SYSTEM SUPERVISION AND ALARMS is amended to read as follows:

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 waterflow switches on all sprinkler systems shall be electrically supervised by a listed fire alarm control unit.

Exceptions:

1. Automatic sprinkler systems protecting one-and two-family dwellings.
2. Limited area sprinkle systems in accordance with Section 903.3.8.
3. Automatic sprinkler systems installed in accordance with NFPA 13R where a common supply main is used to supply both domestic water and the automatic sprinkler system, and a separate shutoff valve for the automatic sprinkler system is not provided.
4. Jockey pump control valves that are sealed or locked in the open position.
5. Control valves to commercial kitchen hoods, paint spray booths or dip tanks that are sealed or locked in the open position.
6. Valves controlling the fuel supply to fire pump engines that are sealed or locked in the open position.
7. Trim valves to pressure switches in dry, preaction and deluge sprinkler systems that are sealed or locked in the open position.
8. Underground key or hub gate valves in roadway boxes.
9. Valves located outside buildings or in a vault that are sealed or locked in the open position.

SECTION 903 AUTOMATIC SPRINKLER SYSTEMS is amended by adding SECTION 903.7 SEPARATION FROM NON- SPRINKLERED AREAS to read as follows:

903.7 Separation from non-sprinklered areas. Unless otherwise exempted by the 2021 International Building Code (IBC) or 2021 International Fire Code (IFC), or required to be of a higher fire resistive construction by the IBC or IFC, a minimum of one hour fire barrier constructed in accordance with the 2021 International Building Code shall be between sprinklered and non-sprinklered areas within a building.

SECTION 904.2.2 COMMERCIAL HOOD AND DUCT SYSTEMS is amended by adding SECTION 904.2.2.1 PERMIT REQUIRED to read as follows:

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 shutoffs are installed. Permittee is responsible for the total installation. The 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 905.1 GENERAL is amended by adding SECTION 905.1.1 SAFETY FACTOR to read as follows:

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 905.2 INSTALLATION STANDARD is amended by adding SECTION 905.2.1 CLASS-I REDUCER to read as follows:

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

SECTION 905.4 LOCATION OF CLASS I STANDPIPE HOSE CONNECTIONS is amended to read as follows:

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.~~

2. On each side of the wall adjacent to the exit opening of a horizontal exit.
   Exception: Where floor areas adjacent to a horizontal exit are reachable from an interior exit stairway hose connection by a 30-foot (9144 mm) hose stream from a nozzle attached to 100 feet (30 480 mm) of hose, a hose connection shall not be required at the horizontal exit.
3. In every exit passageway, at the entrance from the exit passageway to other areas of a building.
   Exception: Where floor areas adjacent to an exit passageway are reachable from an interior exit stairway hose connection by a 30-foot (9144 mm) hose stream from a nozzle attached to 100 feet (30 480 mm) of hose, a hose connection shall not be required at the entrance from the exit passageway to other areas of the building.
4. In covered mall buildings, adjacent to each exterior public entrance to the mall and adjacent to each entrance from an exit passageway or exit corridor to the mall. In open mall buildings, adjacent to each public entrance to the mall at the perimeter line and adjacent to each entrance from an exit passageway or exit corridor to the mall.
5. Where the roof has a slope less than 4 units vertical in 12 units horizontal (33.3- percent slope), a hose connection shall be located to serve the roof or at the highest landing of an interior exit stairway with access to the roof provided in accordance with Section 1011.12.
6. Where the most remote portion of a nonsprinklered floor or story is more than 150 feet (45 720 mm) from a hose connection or the most remote portion of a sprinklered floor or story is more than 200 feet (60 960 mm) from a hose connection, the fire code official is authorized to require that additional hose connections be provided in approved locations.

SECTION 906.2 GENERAL REQUIREMENTS is amended by adding SECTION 906.2.2 TRAVEL DISTANCE to read as follows:

906.2.2 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 Table 906.3(1) or Table 906.3(2).

Travel distance is calculated per floor when determining travel distance to a fire extinguisher in multi-story buildings.

SECTION 906 PORTABLE FIRE EXTINGUISHERS is amended by adding SECTION 906.5.1 CONSPICUOUS LOCATIONS IN GROUP R OCCUPANCIES to read as follows:

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 locations to satisfy the requirements:

1. On a wall in the unit;
2. Inside a closet, cabinet or pantry;
3. Inside a mechanical closet; or
4. Inside a storage closet with no locking device on the door that would require a key or combination to open it.

If methods 2, 3, or 4 are utilized, the following must be done prior to or at the time of move-in:

1. A label or notice must be placed on the door to indicate there is a fire extinguisher inside the area; or

2. A notice disclosing the location of the fire extinguisher must be provided to the occupant.

SECTION 906 PORTABLE FIRE EXTINGUISHERS is amended by adding SECTION 906.11 INSPECTIONS OF NON-RECHARGEABLE FIRE EXTINGUISHERS IN GROUP R OCCUPANCIES to read as follows:

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.

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 907.1.2 FIRE ALARM SHOP DRAWINGS is repealed and replaced with SECTION 907.1.2 FIRE ALARM SHOP DRAWINGS to read as follows:

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 and tap values for speakers when installed.
4. Design minimum audibility level for occupant notification
5. Location of fire alarm control unit, transponders and notification power supplies.
6. Annunciators.
7. Power connections.
8. Battery calculations. Calculations shall be completed in accordance with NFPA 72, Section 10.5.6.3.1 and 10.5.6.3.2.

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 2019 Edition NFPA 72, Chapter 18 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 in responsible charge or licensed planner, and a manufacturer's equipment data sheet for the new fire alarm control unit shall be provided in the submittal package. If a floor plan that reflects the configuration of the existing system is available, it shall be permitted to be submitted in lieu of the detailed riser diagram.

SECTION 907.1 GENERAL is amended by adding SECTION 907.1.4 TESTING OF FIRE ALARM SYSTEMS to read as follows:

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 2019 NFPA 72, Section 7.2.1
2. A copy of the Record of Completion as required by 2019 NFPA 72, Section 7.2.1
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 907.2.1.2 EMERGENCY VOICE/ALARM COMMUNICATION SYSTEM CAPTIONS is repealed.

SECTION 907.2.3 GROUP E is amended to read as follows:

907.2.3 Group E. A manual fire alarm system that initiates the occupant notification signal utilizing an emergency voice/alarm communication system meeting the requirements of Section 907.5.2.2 and installed in accordance with Section 907.6 shall be installed in 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.

Exceptions:

1. A manual fire alarm system shall not be required in Group E occupancies with an occupant load of 50 or less.
2. Emergency voice/alarm communication systems meeting the requirements of Section 907.5.2.2 and installed in accordance with Section 907.6 shall not be required in Group E occupancies with occupant loads of 100 or less, provided that activation of the manual fire alarm system initiates an approved occupant notification signal in accordance with Section 907.5.
3. Manual fire alarm boxes are not required in Group E occupancies where all of the following apply:
   3.1. Interior corridors are protected by smoke detectors.
   3.2. Auditoriums, cafeterias, gymnasiums, and similar areas are protected by heat detectors or other approved detection devices.
   3.3. Shops and laboratories involving dusts or vapors are protected by heat detectors or other approved detection devices.
   3.4. Manual activation is provided from a normally occupied location.
4. Manual fire alarm boxes shall not be required in Group E occupancies where all of the following apply:
   4.1. The building is equipped throughout with an approved automatic sprinkler system installed in accordance with Section 903.3.1.1.

4.2. The emergency voice/alarm communication system will activate on sprinkler water flow.

4.3. Manual activation is provided from a normally occupied location.

SECTION 907.2.7.1 OCCUPANT NOTIFICATION is repealed.

SECTION 907.2.8.2 AUTOMATIC SMOKE DETECTION SYSTEM is amended to read as follows:

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 907.2.13.1.2 DUCT SMOKE DETECTION is repealed and replaced with SECTION 907.2.13.1.2 DUCT SMOKE DETECTION to read as follows:

907.2.13.1.2 Duct smoke detection. Duct smoke detectors complying with Section 907.3.1 shall be located in accordance with the National Fire Protection Association standard *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 cubic feet per minute (cfm) (2.4 m3/s) and serving not more than 10 air-inlet openings.

SECTION 907.2.13.2 FIRE DEPARTMENT COMMUNICATION SYSTEM is repealed.

SECTION 907, FIRE ALARM AND DETECTIONS SYSTEMS is amended by adding SECTION 907.2.24 FIRE ALARM SYSTEMS FOR PROPERTY PROTECTION to read as follows:

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 907.3.1 DUCT SMOKE DETECTORS is repealed and replaced by SECTION 907.3.1 DUCT SMOKE DETECTORS to read as follows:

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 when 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 a supervisory signal and not as a fire alarm. They shall not be used as a substitute for required open area detection.

Exceptions:

1. 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 907, FIRE ALARM AND DETECTIONS SYSTEMS is amended by adding SECTION 907.3.5 FIRE ALARM SYSTEMS - EMERGENCY CONTROL to read as follows:

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 A17.1-2019, 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 907.4.2.1 LOCATION is amended to read as follows:

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 manual fire alarm box (e.g., glass walls, interior brick or rock walls), a manual fire alarm box shall be allowed to be located in the normal path of egress, where approved by the Fire Marshal or his/her designee.

SECTION 907.5.1.1 PRESIGNAL FEATURE is repealed and is replaced by SECTION 907.5.1.1 PRESIGNAL FEATURES AND POSITIVE ALARM SEQUENCES to read as follows:

907.5.1.1 Presignal features 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 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 Presignal feature or Positive Alarm Sequence is provided, a signal shall be annunciated at a constantly attended location approved by the fire code official, so that occupant notification can be activated 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 907.5.2.1 AUDIBLE ALARMS is amended by adding SECTIONS 907.5.2.1.4 TESTING OF AUDIBLE ALARMS IN OCCUPANCIES OTHER THAN GROUP R and 907.5.2.1.5 TESTING OF AUDIBLE ALARMS IN GROUP R OCCUPANCIES to read as follows:

907.5.2.1.4 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 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 bathroom doors and balconies, 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.

907.5.2.1.5 Testing of audible alarms in Group R occupancies. Audibility levels for all Group R occupancies shall be in accordance with the requirements of Section 907.5.2.1.1, and shall be tested utilizing the following criteria:

1. A 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 audiometer 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 percent of maximum volume, showers running, bathroom exhaust systems running, and air conditioning units running.

4. Levels shall be taken in the most remote area of the dwelling or sleeping unit first, including bathrooms and balconies.

5. Initial readings to confirm the ambient sound level in each area shall be taken.

6. The fire alarm system shall be activated and readings in the tested areas shall be retaken and compared with the requirements.

SECTION 907.5.2.2, EMERGENCY VOICE/ALARM COMMUNICATION SYSTEMS, is amended to read as follows:

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~~ a minimum of 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 907.5.2.2.4 EMERGENCY VOICE/ALARM COMMUNICATION CAPTIONS is repealed.

SECTION 907.2.3.1 PUBLIC USE AREAS AND COMMON USE AREAS is amended to read as follows:

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 907.5.2.3.3.1 WIRED EQUIPMENT is amended to read as follows:

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:

1. The replacement of audible appliances with combination audible/visible appliances or additional visible notification appliances.

2. The future extension of the existing wiring from the unit smoke alarm locations to required locations for visible appliances.

3. For wired equipment, the fire alarm power supply and circuits shall have not less than 5-percent excess capacity to accommodate the future addition of visible alarm notification appliances, and a single access point to such circuits shall be available on every story. Such circuits shall not be required to be extended beyond a single access point on a story. The fire alarm system shop drawings required by Section 907.1.2 shall include the power supply and circuit documentation to accommodate the future addition of visible notification appliances.

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 Development Services or the San Antonio Fire Department Office of the Fire Marshal.

SECTION 907.5.2.3.4 GROUP R-2 SLEEPING AREAS is added to read as follows:

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 2019 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 18.5.5.1 shall be installed.

SECTION 907.5.2.3.5 COMBINATION DEVICES is added to read as follows:

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 907.6.3 INITIATING DEVICE IDENTIFICATION is amended to read as follows:

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.

Exceptions:

1. Fire alarm systems in single-story buildings less than 22,500 square feet (2090 m2) in area.
2. Fire alarm systems that only include manual fire alarm boxes, waterflow initiating devices and not more than 10 additional alarm-initiating devices.
3. Special initiating devices that do not support individual device identification.
4. Fire alarm systems or devices that are replacing existing equipment.

SECTION 907 FIRE ALARM AND DETECTION SYSTEMS is amended by adding SECTION 907. 11 ALARM SIGNAL SILENCING SWITCH to read as follows:

907.11 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 908.3 FIRE ALARM SYSTEM INTERFACE is amended to read as follows:

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

SECTION 912.2.1 VISIBLE LOCATION is amended to read as follows:

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 912.2.1 EXISTING BUILDINGS is amended *as follows:*

912.2.1 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~~.~~ and mounted no lower than 7 feet from grade to the bottom edge of the sign. Such signs shall be subject to the approval of the fire code official.

SECTION 912.4.1 LOCKING FIRE DEPARTMENT CONNECTION CAPS is repealed and replaced with SECTION 912.4.1 LOCKING FIRE DEPARTMENT CONNECTION CAPS to read as follows:

912.4.1 Locking fire department connection caps. FDC shall have locking caps in the following areas/occupancies: The area described in section 11-37 of these amendments, Group A, E, I occupancies, High-Rise buildings, and any other location a fire code official determines that a locking cap would be necessary and/or beneficial for firefighting needs.

SECTION 912 FIRE DEPARTMENT CONNECTIONS is amended by adding SECTION 912.8 LOCATION AND TYPE and TABLE 912.8 to read as follows:

912.8 Location and type. Sprinkler system and standpipe fire department hose connections shall be as follows:

1. Within forty (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*; and

9. See Table 912.8 – FDCs Required, by System Type

Table 912.8
FDCs Required, by System Type

Sprinkler Systems Wet Dry	Either a 5 Inch Storz inlet or (2)2 ½ Inch inlets		
Standpipes: Automatic Wet Automatic Dry Semiautomatic Dry		Either a 5-inch Storz inlet or (2)2 ½ inch inlets	
Standpipes: Manual Wet Manual Dry			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

Standpipes: All High-Rise Buildings			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: 1. High-rise buildings and/or 2. Buildings or multiple attached buildings exceeding 900 ft (274.3 m) perimeter distance In accordance with 2019 NFPA 14 7.12.2.2

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 1003 GENERAL MEANS OF EGRESS is amended by adding SECTION 1003.8 SPECIAL PROVISIONS to read as follows:

1003.8 Special provisions. Rooms in E occupancies used for kindergarten or daycare, children five or under, 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 [BE]1004.5 AREAS WITHOUT FIXED SEATING is amended 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 ~~*fire code official*~~ Building Official shall establish a function based on a listed use 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 ~~*fire code 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 [B]1008.3 EMERGENCY POWER FOR ILLUMINATION is amended by adding SECTION 1008.3.6 ILLUMINATION IN GROUP E to read as follows:

1008.3.6 Illumination in Group E. 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:

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 LUMINOUS EGRESS PATH MARKINGS is adopted and amended by adding an additional exception to read as follows:

[BE] 1025.1 General. *Approved* luminous egress path markings delineating the exit path shall be provided in high-rise buildings of Group A, B, E, I-1, M or R-1 occupancies in accordance with this section.

Exceptions:

1. Luminous egress path markings shall not be required on the *level of exit discharge* in lobbies that serve as part of the exit path in accordance with Section 1028.2, Exception 1.
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.

SECTIONS 1103.4.2 THREE TO FIVE STORIES, 1103.4.4 ATRIUMS AND COVERED MALLS, 1103.4.5 ESCALATORS IN GROUP B AND M OCCUPANCIES, AND 1103.4.6 ESCALATORS CONNECTING FOUR OR FEWER STORIES are repealed.

SECTION 1103.5.1 GROUP A-2 is amended to read as follows:

1103.5.1 Group A-2. Where alcoholic beverages are consumed in a Group A-2 occupancy identified as a Night Club as defined by this code and having an occupant load of 300 or more, the *fire area* containing the Group A-2 occupancy shall be equipped with an *automatic sprinkler system* in accordance with Section 903.3.1.1. Occupancies shall have 5 years from ~~the date of the adoption of this [the 2018 IFC and local amendments adoption date]~~ October 1, 2018 to comply with the fire sprinkler installation requirements.

SECTION 1103.7.5.1 Group R-1 HOTEL AND MOTEL MANUAL FIRE ALARM SYSTEM is repealed and replaced with 1103.7.5.1 GROUP R-1 HOTEL AND MOTEL MANUAL FIRE ALARM SYSTEM to read as follows:

1103.7.5.1 Group R-1 hotel and motel manual fire alarm system. A manual fire alarm system that activates the occupant notification system in accordance with Section 907.5 shall be installed in existing Group R-1 hotels and motels more than three stories or with more than 20 sleeping units.

Exceptions:

1. Buildings less than two stories in height where all sleeping units, attics and crawl spaces are separated by a 1-hour fire-resistance-rated construction and each sleeping unit has direct access to a public way, egress court or yard.
2. Manual fire alarm boxes are not required throughout the building where the following conditions are met:
   2.1. The building is equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2.
   2.2. The notification appliances will activate upon sprinkler water flow.
   2.3. Not less than one manual fire alarm box installed at an approved location.

SECTION 1103.7.6 GROUP R-2 is repealed and replaced with 1103.7.6 GROUR R-2 to read as follows:

1103.7.6 Group R-2. A manual fire alarm system that activates the occupant notification system in accordance with Section 907.5 shall be installed in existing Group R-2 occupancies if the dwelling units or sleeping units are served by an interior corridor and the building is either more than three stories in height or contains more than 16 dwelling or sleeping units. Group R-2 occupancies shall have until October 1, 2023 to comply with the manual fire alarm system retrofit requirements.

Exceptions:

1. Where each living unit is separated from other contiguous living units by fire barriers having a fire-resistance rating of not less than .75 hour, and where each living unit has either:
   1.1. Its own independent exit or its own independent stairway or ramp discharging at grade;
   1.2. Its own independent exit directly to the exterior of the building that is connected to an exterior balcony with a stairway or ramp discharging at grade; or
   1.3. Its own independent egress directly to the exterior of the building at grade.
2. A separate fire alarm system is not required in buildings that are equipped throughout with an approved supervised automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2.
3. Where the interior corridor serves less than 5 units in a building that is two stories or less and is equipped with sealed battery or electric smoke alarms installed on the ceiling at the highest point of the interior corridor, interconnected with smoke alarm (s) located somewhere in the sleeping or dwelling units served by the corridor, and the corridor shall be equipped with emergency lighting. Occupancies utilizing this exception must register with the San Antonio Fire Department Office of the Fire Marshal for an inspection when installation is complete.

SECTION 1103.8 SINGLE AND MULTIPLE-STATION SMOKE ALARMS is amended to read as follows:

1103.8 Single- and multiple-station smoke alarms. Single-and multiple-station smoke alarms shall be installed in existing Group I-1 and R occupancies in accordance with Sections 1103.8.1 through 1103.8.3.

Exception: All R3 occupancies not used for commercial purposes, including duplexes and houses for rent.

SECTION 1103.8.1 WHERE REQUIRED is repealed and replaced with SECTION 110308.1 WHERE REQUIRED to read as follows:

1103.8.1 Where required. Existing Group I-1 and R occupancies shall be provided with single-station smoke alarms in accordance with Section 907.2.11, except as provided in Section 1103.8.2 and 1103.8.3.

Exception: Where smoke detectors connected to a fire alarm system have been installed as a substitute for smoke alarms if installed in all sleeping areas as prescribed in 907.2.11.

SECTION 1103.8.2 INTERCONNECTION is repealed and replaced with SECTION 1103.8.2 INTERCONNECTION to read as follows:

1103.8.2 Interconnection. Where more than one smoke alarm is required to be installed within an individual dwelling or sleeping unit, the smoke alarms shall be interconnected in such a manner that the activation of one alarm will activate all of the alarms in the individual unit. The alarm shall be clearly audible in all bedrooms over background noise levels with all intervening doors closed.

Exceptions:

1. Interconnection is not required in buildings that are not undergoing alterations.
2. Smoke alarms in existing areas are not required to be interconnected where alterations do not result in the removal of interior wall or ceiling finishes exposes the structure.

SECTION 1103.8.3 POWER SOURCE is amended to read as follows:

1103.8.3 Power source. Single-station smoke alarms shall receive their primary power from the building wiring provided that such wiring is served from a commercial source and shall be equipped with a battery backup. Smoke alarms with integral strobes that are not equipped with battery backup shall be connected to an emergency electrical system. Smoke alarms shall emit a signal when the batteries are low. Wiring shall be permanent and without a disconnecting switch other than as required for overcurrent protection.

Exceptions:

1. Smoke alarms are permitted to be solely battery operated in existing buildings where construction is not taking place.
2. Smoke alarms are permitted to be solely battery operated in buildings that are not served from a commercial power source.
3. Smoke alarms are permitted to be solely battery operated in existing areas of buildings undergoing alterations or repairs that do not result in the removal of interior walls or ceiling finishes exposing the structure, unless there is an attic, crawl space or basement available that could provide access for building wiring without the removal of interior finishes.
4. In all R-2 occupancies, smoke alarms are permitted to be solely battery operated if added to comply with Section 1103.8.

5. In all R-2 occupancies, smoke alarms are permitted to be operated solely from the building wiring if installed prior to ~~[the adoption date of this code]~~ October 1, 2018.

SECTION 1103.9 CARBON MONOXIDE DETECTION is amended to read as follows:

1103.9 Carbon monoxide detection in other than R-2 occupancies. Carbon monoxide detection shall be installed in existing ~~Group I-1, I-2, I-4 and R occupancies and in classrooms in Group E occupancies~~ dwelling units and sleeping units where those units include any of the conditions identified in Sections 915.1.2 through 915.1.6. The carbon monoxide alarms shall be installed in the locations specified in Section 915.2 and the installation shall be in accordance with Section 915.4.
Exceptions:

1. Carbon monoxide alarms are permitted to be solely battery operated where the code that was in effect at the time of construction did not require carbon monoxide detectors to be provided.
2. Carbon monoxide alarms are permitted to be solely battery operated in dwelling units that are not served from a commercial power source.
3. A carbon monoxide detection system in accordance with Section 915.5 shall be an acceptable alternative to carbon monoxide alarms.

SECTION 1103.9.1 CARBON MONOXIDE ALARMS IN EXISTING R-2 OCCUPANCIES is added to read as follows:

1103.9.1 Carbon monoxide alarms in existing R-2 occupancies. Carbon monoxide alarms shall be installed in all existing Group R-2 dwelling units and sleeping units where any of the following conditions apply:

1. If the code that was in effect at the time of construction required carbon monoxide detectors to be provided;
2. Dwelling units and sleeping units located in buildings that contain fuel-burning appliances servicing multiple dwelling units or sleeping units;

Dwelling units and sleeping units shall have 1 year from [~~the date of adoption of this code~~] October 1. 2018 to comply with the Carbon Monoxide Alarms retrofit requirements.
Installation:
If the code that was in effect at the time of construction required carbon monoxide alarms to be provided, they shall be installed in accordance with that code.
If the code that was in effect at the time of construction did not require carbon monoxide alarms to be provided, carbon monoxide alarms are permitted to be solely battery operated or plugged into an existing electrical plug. Carbon monoxide alarms are permitted to be solely battery operated in dwelling units that are not served from a commercial power source. Carbon monoxide alarms are permitted to be a combination of smoke and carbon monoxide alarms.

Exceptions:

1. A carbon monoxide detection system in accordance with Section 915.5 shall be an acceptable alternative to carbon monoxide alarms.
2. Carbon monoxide detection shall not be required in individual dwelling units or sleeping units where an electric or sealed battery carbon monoxide alarm is provided in the room(s) containing the fuel-burning appliance serving multiple dwelling units or sleeping units and the unit(s) immediately adjacent to the room containing the fuel-burning appliance serving multiple dwelling units or sleeping units.

SECTION 1104.1 GENERAL is repealed and replaced with SECTION 1104.1 GENERAL to read as follows:

1104.1 General. Means of egress in existing buildings shall comply with the minimum egress requirements when specified in Table 1103.1 as further enumerated in Sections 1104.2 through 1104.25, or the building code that applied at the time of construction, if in the opinion of the fire code official, they do not constitute a distinct hazard to life. Existing buildings that were not required to comply with a building code at the time of construction shall comply with the minimum egress requirements when specified in Table 1103.1 as further enumerated in Sections 1104.2 through 1104.25 and, in addition, shall have a life safety evaluation prepared, consistent with the requirements of Section 403.2.10 and 403.2.11. The life safety evaluation shall identify any changes to the means of egress that are necessary to provide safe egress to occupants and shall be subject to review and approval by the fire code official. The building shall be modified to comply with the recommendations as set forth in the approved evaluation.

SECTION 1104.5 ILLUMINATION EMERGENCY POWER, SUBSECTION 8. is amended to read as follows:

8. Group R-2 in interior stairs and corridors only.

Exception: Where each dwelling unit or sleeping unit has direct access to the outside of the building at grade.

SECTION [BR] 1104.16.2 OPENING PROTECTIVES is repealed.

SECTION 1104.16 FIRE ESCAPE STAIRWAYS is amended by adding SECTION 1104.16.8 EXTERIOR FIRE ESCAPES to read as follows:

1104.16.8 Exterior Fire Escapes. Any existing exterior 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.

TABLE 1104.18 COMMON PATH, DEAD-END AND TRAVEL DISTANCE LIMITS (by occupancy) is amended by altering the number of "Dead-End Limit" Sprinklered (feet) chart for the following occupancy groups listed:

TABLE 1104.18

COMMON PATH, DEAD-END AND TRAVEL DISTANCE LIMITS (by occupancy)

	COMMON PATH LIMIT	DEAD-END LIMIT	TRAVEL DISTANCE LIMIT

OCCUPANCY	Unsprinklered (feet)	Sprinklered (feet)	Unsprinklered (feet)	Sprinklered (feet)	Unsprinklered (feet)	Sprinklered (feet)
Group A	20/75 [a]	20/75 [a]	20 [b]	20 [b]	200	250
Group B [h]	75	100	50	70	200	300
Group E	75	75	20	70	200	250
Group F-1d, S-1 [d, h]	75	100	50	70	200	250
Group F-2d, S-2 [d, h]	75	100	50	70	300	400
Group H-1	25	25	0	0	75	75
Group H-2	50	100	0	0	75	100
Group H-3	50	100	20	20	100	150
Group H-4	75	75	20	20	150	175
Group H-5	75	75	20	50	150	200
Group I-1	75	75	20	70	200	250
Group I-2	Notes e,g	Notes e, g	Note f	Note f	150	200 [c]
Group I-3	100	100	NR	NR	150 [c]	200 [c]
Group I-4 (Day care centers)	NR	NR	20	20	200	250
Group M (Covered Or Open Mall)	75	100	50	70	200	400
Group M (Mercantile)	75	100	50	70	200	250
Group R-1 (Hotels)	75	75	50	70	200	250

Group R-2 (Apartments)	75	125	50	70	200	250
Group R-3 (One- and two-family)	NR	NR	NR	NR	NR	NR
Group R-4 (Residential care/assisted living)	NR	NR	NR	NR	NR	NR
Group U [h]	75	100	20	70	300	400

SECTION 1104.22 EXTERIOR STAIRWAY PROTECTION is repealed.

SECTION 1104.25 EGRESS PATH MARKINGS is repealed.

SECTION 1203.1 GENERAL is amended by adding SECTIONS 1203.1.10 NATURAL GAS GENERATORS and 1203.1.11 DIESEL FUELED GENERATORS FUEL TANK VENTING to read as follows:

1203.1.10 Natural gas generators. Natural gas generators shall be allowed to be used as an emergency or standby power source for emergency life safety equipment only when all of the following conditions are met:

1. The natural gas line supplying the generator must have a separate shutoff that is not affected by turning off the supply line to the building.
2. The shutoff for the natural gas line supplying the generator must have a sign at the shutoff that reads: "EMERGENCY GENERATOR GAS LINE, SHUT DOWN THIS LINE ONLY FOR EMERGENCIES INVOLVING EMERGENCY GENERATOR"
3. The generator must be a minimum of 10 feet from any building opening.
4. The installation of all natural gas generators shall be required to meet the provisions of the currently adopted *International Plumbing Code* and *National Electrical Code*.

1203.1.11 Diesel fueled generator fuel tank venting. Fuel tanks associated with diesel fueled generators shall be vented in accordance with Section 5704.2.7.3.3

SECTION 1204.10 FIRE EXTINGUISHER is amended to read as follows:

1204.10 Fire extinguisher. A listed portable fire extinguisher complying with Section 906 with a minimum rating of ~~2-A:20-B:C~~ 3-A:40-B:C shall be provided not more than ~~50 (15 240 mm)~~ 30 feet from the portable generator.

SECTION 2301 GENERAL is amended by adding SECTIONS 2301.7 PORTABLE SERVICE STATIONS and 2301.8 FLAME DETECTION SYSTEMS to read as follows:

2301.7 Portable Service Stations.

1. No person shall own, operate or maintain a tank used for the storage of flammable liquids maintained on skids or a similar type stand which is designed or intended to be used for dispensing flammable liquids into the fuel tanks of motor vehicles owned by the public.
2. The foregoing provisions of this article are intended to prohibit the use of so-called portable service station or similar units constructed to dispense flammable liquids to the motoring public and designed so that the unit can be easily picked up and moved.

2301.8 Flame detection systems. Fuel dispensing areas inside and outside of buildings that fuel vehicles fueled by gases including, but not limited to LPG, LNG, CNG or Hydrogen shall provide a flame detection system that complies with approved standards. The flame detection system shall be designed to detect flame of gaseous fuels that are being dispensed.

SECTION 2303.2 EMERGENCY DISCONNECT SWITCHES. is repealed and replaced with SECTION 2303.2 EMERGENCY DISCONNECT SWITCHES to read as follows:

2303.2 Emergency disconnect switches. An approved, clearly identified and readily accessible emergency disconnect switch shall be provided at an approved location to stop the transfer of fuel to the fuel dispensers in the event of a fuel spill or other emergency. An emergency disconnect switch for exterior fuel dispensers shall be located within 100 feet (30 480 mm) of, but not less than 20 feet (6096 mm) from, the fuel dispensers. For interior fuel-dispensing operations, the emergency disconnect switch shall be installed at an approved location. Such devices shall be distinctly labeled as: EMERGENCY FUEL SHUTOFF. Signs shall be provided in approved locations and be a minimum of 18 inches high and 24 inches wide.

SECTION 2303.2.2 ADDITIONAL EMERGENCY DISCONNECT SWITCHES FOR ATTENDED SELF SERVICE is added to read as follows:

2303.2.2 Additional emergency disconnect for attended self service. Attended facilities shall have an additional emergency disconnect switch located inside the building for attendant use at a location *approved* by the fire code official.

SECTION 2306.2.1.1 INVENTORY CONTROL FOR UNDERGROUND TANKS is repealed and replaced with SECTION 2306.2.1.1 INVENTORY CONTROL FOR UNDERGROUND TANKS to read as follows:

2306.2.1.1 Inventory control for underground tanks.

Accurate daily (normal working days only) inventory records shall be maintained and reconciled on all Class I, II or III-A liquid storage tanks for indication of possible leakage from tanks or piping. The records shall be made available for inspection by the Fire Marshal, and shall include, as a minimum, records showing by product: daily reconciliation between sales, use, receipts, and inventory on hand. If there is more than one system consisting of a tank(s), serving pump(s), or dispenser(s) for any product, the reconciliation shall be made separately for each tank system.

1. Daily inventory shall be maintained for each tank system at each location by the operator. The inventory records shall be kept for the past 12 months at the premises.
2. Inventory shall be based on the actual daily measurement and recording daily recording of actual sales, or by readout from an automated gauging system. The inventory records shall include a daily compilation of gain or loss. The mere recording of pump meter reading and product delivery receipts shall not constitute adequate inventory records.
3. The operator of the location shall be held responsible for notifying the owner or person(s) in control of the facility to take action to correct any abnormal loss or gain not explainable by spillage, temperature variations or both causes.
4. The Fire Marshal may require the operator of an underground tank storage system to test the system for tightness, at the operator's expense, when accurate daily inventory records have not been maintained as required or when in his judgment conditions indicate possible leakage of product from the location of such tanks.
5. The Fire Marshal may require copies of Class I, II and III-A liquid storage tank inventories, deliveries or receipt of product sales and dip gauge stick readings or other control measures in addition to copies of any tank tightness or line leakage test results from the station operator, agent, or terminal management.
6. When a service station tank is found to be leaking, its contents shall be removed immediately. If any investigations or tests indicate the source of such loss, the owner shall take immediate action to correct the system failure and remove dangerous spillage from the environment.
7. The Fire Marshal may order the closure of a Service Station by barricading if necessary and the emptying of contents from storage tanks should the operator of a service station be unwilling to cooperate with the Fire Department during the search for the source of such leakage or should the Fire Marshal determine that a hazardous condition exists that merits such action.

SECTION 2306.2.3 ABOVE-GROUND TANKS LOCATED OUTDOORS, ABOVE GRADE is amended by adding SECTIONS 2306.2.3.1 INSPECTIONS, 2306.2.3.2 REQUIRED ACCESS, and 2306.2.3.3 FIRE HYDRANT ACCESS to read as follows:

2306.2.3.1 Inspections. An inspection of the installation shall be conducted prior to loading the tank with fuel. For those installations approved by the Fire Chief or his designee to dispense class 1 liquids, the initial loading of fuel shall be witnessed by the fire inspector.

2306.2.3.2 Required access. Fire apparatus access roads shall be provided for every aboveground storage tank. The aboveground storage tank shall not be more than 150 feet from fire apparatus access roads as measured by an approved route.

2306.2.3.3 Fire hydrant access. A minimum of one fire hydrant shall be provided for every aboveground storage tank. The aboveground storage tank shall not be located more than 500 feet from a fire hydrant as measured by an approved route. The distance may be extended to 850 feet for tanks constructed to the design criteria of UL 2085. A minimum of two fire hydrants meeting the distance requirements per table C102.1 shall be required for storage tank farms exceeding an aggregate capacity of 48,000 gallons of Class I, II, and IIIA liquid fuels. Fire flow requirements for storage tank farms and refineries shall be determined by a licensed Fire Protection Engineer and shall have a minimum flow of 2000 gallons per minute.

SECTION 2307 LIQUIFIED PETROLEUM GAS MOTOR FUEL DISPENSING FACILITIES is repealed.

SECTION 2311.8.9 GAS DETECTION SYSTEM is amended to read as follows:

2311.8.9 Gas detection system. Repair garages used for repair of vehicles fueled by ~~nonodorized~~ gases, including, but not limited to, hydrogen, CNG, and ~~nonodorized~~ LNG, shall be provided with a gas detection system that complies with Section 916. The gas detection system shall be designed to detect leakage of ~~nonodorized~~ gaseous fuel. Where lubrication or chassis service pits are provided in garages used for repairing ~~nonodorized~~ LNG-fueled vehicles, gas sensors shall be provided in such pits.

SECTION 2809 EXTERIOR STORAGE OF FINISHED LUMBER AND SOLID BIOFUEL PRODUCTS is amended by adding SECTION 2809.6 LUMBER STORAGE OTHER THAN COMMERCIAL LUMBER DEALERS to read as follows:

2809.6 Lumber storage other than commercial lumber dealers. It shall be unlawful for any person within the City limits to place, pile, or cause to be placed or piled, any lumber or timber to a greater height than six feet at the topmost portion from ground level. Storage of lumber in such instances must allow at least an 18-inch space from ground level to bottom of the lumber pile. Such pile must be at least three feet from any adjoining property line and total pile area shall not exceed 100 square feet. Any lumber stored or kept upon, or in, any premises in the City must be piled in a neat and orderly manner free from rubbish or other waste materials. Nothing in this section shall apply to storage of lumber by commercial lumber dealers.

SECTION 3103.2 APPROVAL REQUIRED is repealed and replaced with SECTION 3103.2 APPROVAL REQUIRED to read as follows:

3103.2 Approval required. Tents and membrane structures used for assembly purposes having an occupant load over 50, and all other occupancies having an area in excess of 1200 square feet shall not be erected, operated or maintained for any purpose without first obtaining a permit and approval from the fire code official.

SECTION 3103.4 PERMITS is repealed and replaced with SECTION 3103.4 PERMITS to read as follows:

3103.4 Permits. Permit to operate a tent or air supported structure shall consist of a Certificate of Occupancy issued by Development Services.

SECTION 3301 GENERAL is amended by adding SECTION 3301.3 ADDRESS NUMBERS to read as follows:

3301.3 Address numbers. Buildings under construction shall place address numbers and/or building numbers in a position that is plainly legible and visible from the street or road fronting the property with minimum six-inch numbers.

SECTION 3315 AUTOMATIC SPRINKLER SYSTEM is amended by adding SECTION 3315.3 FURNITURE, FIXTURES, AND EQUIPMENT to read as follows:

3315.3 Furniture, fixtures, and equipment. In buildings where an automatic sprinkler system is required, furniture, fixtures, and equipment shall not be stored in the building until the system has been tested and approved by the fire code official and monitoring of system is active.

Exception: As approved by the fire code official.

CHAPTER 37 COMBUSTIBLE FIBERS is amended by adding Section 3706 CONSTRUCTION AND PROTECTION REQUIREMENTS to read as follows:

3706 Construction and protection requirements.

1. Handling and storage of large quantities of waste paper, rags, or other combustible materials shall not be allowed in a building of any type in excess of 1500 square feet area unless the building is protected with an approved automatic sprinkler system.
2. Handling and storage building for waste paper, rags or other combustible materials shall not exceed one story in height unless of Type I construction and fully protected with approved automatic sprinkler system.
3. No loose waste paper, rags, trash or rubbish of any kind, or similar combustible materials shall be allowed on the premises on the outside of any building.
4. Bales, waste paper, rags, and other combustibles in baled lots shall be stored in buildings. Said buildings shall be required to have aisles when 25,000 cubic feet or more of such materials are stored. Baled materials, if stored outside of buildings, shall not be stored within 25 feet of any building. EXCEPTION: Baled materials may be stored within 25 feet of a building's outside wall when a wall sprinkler curtain is provided on the building.

CHAPTER 41 AUTOMOBILE WRECKING YARDS is added to read as follows:

CHAPTER 41

AUTOMOBILE WRECKING YARDS

4101 Automobile dismantling and storage. Nothing but automobile dismantling shall be carried on in any automobile wrecking yard or establishment, and if repairs are made to any automobile or other self-propelled vehicle, such repairs shall be made in a building meeting all the requirements of a public automobile garage or automobile repair shop and in keeping with the regulations for such occupancy.

All gasoline shall be drained from the gasoline reservoirs of all automobiles or other self- propelled vehicles stored or kept on the premises, unless such automobiles or vehicles are in such state of repair as to enable them to be removed from the premises under their own power.

CHAPTER 42 entitled PROTECTION OF OUTDOOR STORAGE is added to read as follows:

CHAPTER 42 PROTECTION OF OUTDOOR STORAGE

4201 GENERAL

4201.1 The hazards of exposure to outdoor storage from ignition sources and exposing fires and the infinite variety of conditions under which such exposures can occur render impossible the formulation of any single table, formula, or set of rules that can cover all conditions adequately.

4202.2 In general, the provision of automatic fire protection is impractical for outdoor storage. As a result, the following is required:

1. Control of potential ignition sources such as from exposing buildings, transformers, yard equipment, refuse burners, overhead power lines, and vandals;
2. Elimination of adverse factors such as trash accumulations, weeds, and brush;
3. Provision of favorable physical conditions such as limited pile sizes, low storage heights, wide aisles, and possible use of fire-retardant covers (e.g., tarpaulins);
4. Rapid and effective application of manual fire-fighting efforts by the provision of fire alarms, strategically located hydrants, and adequate hose houses or hose reels.

4201.3 Outdoor storage is acceptable for materials that are as follows:

1. Of low fire hazard, not requiring protection even if located indoors
2. Of sufficiently low value that a potential loss would not justify the utilization of building space
3. Of such severe fire hazard that indoor protection is impractical when balanced against potential loss of large volume and bulk, making it impractical to construct and protect a building to house the storage.

4201.4 Where materials that normally would be stored in buildings are stored outdoors in temporary emergencies, special precautions shall be taken for their safeguard and that they be moved to a storage warehouse as soon as possible.

4202 Responsibilities of Management

4202.1 It is the responsibility of management to properly consider the hazards of the various materials handled. Protection requirements and storage arrangements vary with the combustibility of the materials. The care, cleanliness, and maintenance exercised by management determine to a large extent the relative fire safety in the storage area.

4203 Site

4203.1 In selecting a site for outdoor storage, the following requirements shall be followed:

1. Adequate public water system with hydrants suitably located for protection of the storage.
2. Adequate all-weather roads for fire department apparatus response.
3. Sufficient clear space from buildings or from other combustible storage that constitutes an exposure hazard.
4. Absence of flood hazards.
5. Adequate clearance space between storage piles and any highways, bridges, railroads, and woodlands.
6. Topography as level as possible to provide storage stability.
7. Adequate clearance between the storage of combustible materials and pipelines, pipe bridges, cable trays and electrical transmission lines.

4203.2 The entire site shall be surrounded by a fence or other suitable means to prevent unauthorized access. An adequate number of gates shall be provided in the surrounding fence or other barriers to permit ready access of fire apparatus.

4204 Material Piling

4204.1 Materials shall be stored in unit piles as low in height and small in area as is consistent with good practice for the materials stored. The maximum height shall be determined by the stability of pile, effective reach of hose streams, combustibility of the commodity, and ease of pile breakdown under fire or mop-up conditions. Under no circumstances shall the pile size dimensions exceed 50 feet by 150 feet by 20 feet high unless the specific commodities maximum dimensions are listed elsewhere in the code.

4204.2 Aisles shall be maintained between individual piles, between piles and buildings, and between piles and the boundary line of the storage site. Sufficient driveways having the width of at least 20 ft shall be provided to allow the travel of fire equipment to all portions of the storage area. Aisles shall be at least twice the pile height to reduce the spread of fire from pile to pile and to allow ready access for firefighting, emergency removal of material, or salvage purposes.

4204.3 As the commodity class increases in combustibility or where storage could be ignited easily from radiation, wider aisles shall be provided. Smaller unit piles could be an alternative to wider aisles if yard space is limited.

4204.4 Boundary posts with signs designating piling limits shall be provided to indicate yard area, roadway, and aisle limits.

4205 Buildings and Other Structures

4205.1 Yard storage, particularly storage of commodities in the higher heat release category, shall have as much separation as is practical from important buildings and structures, but not less than that offered by NFPA 80A, Recommended Practice for Protection of Buildings from Exterior Fire Exposures.

4205.2 As guidance in using NFPA 80A to establish clear spaces, the following classification of severity with commodity classes of this standard shall be used on the basis of 100 percent openings representing yard storage:

1. Light severity—Commodity Class I
2. Moderate severity—Commodity Class II
3. Interpolate between moderate and severe severity for Commodity Class III
4. Severe severity—Commodity Class IV and Class A plastics

The guidelines of Section 4205.2 apply to the equivalent commodity classes of this standard. The severity of the exposing building or structure also shall be a consideration where establishing a clear space.

4206 Yard Maintenance and Operations

4206.1 The entire storage site shall be kept free from accumulation of unnecessary combustible materials. Vegetation shall be kept to a maximum of four inches high. Procedures shall be provided for weed control and the periodic cleanup of the yard area.

4206.2 No heating equipment shall be located or used within the storage area. Salamanders, braziers, portable heaters, and other open fires shall not be used.

4206.3 Smoking shall be prohibited, except in locations prominently designated as smoking areas. "No Smoking" signs shall be posted in prohibited areas.

4206.4 Welding and cutting operations shall be prohibited in the storage area.

4206.5 Tarpaulins used for protection of storage against the weather shall be of fire-retardant fabric.

4206.6 Motorized vehicles using gasoline, diesel fuel, or liquefied petroleum gas as fuel shall be garaged in a separate, detached building.

4207 Fire Protection

4207.1 Fire extinguishers of an appropriate type shall be placed at well-marked strategic points throughout the storage area so that one or more portable fire extinguisher units can quickly be made available for use at any point. Where the climate is such that there is a danger of freezing, suitable extinguishers for freezing temperatures shall be used.

SECTION 5003.4.1 MATERIAL SAFETY DATA SHEET SUBMITTAL is added to read as follows:

5003.4.1 Material safety data sheet submittal. The Fire Marshal may require that information on the nature of any and all potentially hazardous material be submitted to the Fire Department on the Standard Material Safety Data Sheet provided by the U.S. Department of Labor Occupational Safety and Health Administration.

SECTION 5004.2.2.5 MONITORING is amended to read as follows:

5004.2.2.5 Monitoring. An approved monitoring method shall be provided to detect hazardous materials in the secondary containment system. The monitoring method is allowed to be visual inspection of the primary or secondary containment, or other approved means. Where secondary containment is subject to the intrusion of water, a monitoring method for detecting water shall be provided. Where monitoring devices are provided, they shall be connected to approved visual or audible alarms. Such systems shall be inspected and tested by the owner or occupant annually and properly maintained in an operative condition at all times. Records of inspections, tests and repairs shall be maintained and readily available to the fire code official upon request.

SECTIONS 5306.2.1 ONE-HOUR EXTERIOR ROOMS AND 5306.2.2 ONE-HOUR INTERIOR ROOMS are amended to read as follows:

Section 5306.2.1 One-hour exterior rooms. A 1-hour exterior room shall be a room or enclosure separated from the remainder of the building by fire barriers constructed in accordance with Section 707 of the International Building Code or horizontal assemblies constructed in accordance with Section 711 of the International Building Code, or both, with a fire resistance rating of not less than 1 hour. Openings between the room or enclosure and interior spaces shall be self-closing smoke- and draft-control assemblies having a fire protection rating of not less than 1 hour. Rooms shall have not less than one exterior wall that is provided with not less than two vents. Each vent shall have a minimum free opening area of 36 square inches (232 cm^2) for each 1,000 cubic feet (28 m^3) at normal temperature and pressure (NTP) of gas stored in the room and shall be not less than 72 square inches (465 cm^2) in aggregate free opening area. One vent shall be within 6 inches (152 mm) of the floor and one shall be within 6 inches (152 mm) of the ceiling. Rooms shall be provided with not less than one automatic sprinkler to provide container cooling in case of fire. Where amounts exceed 1500 ft3 (42.5m3), rooms shall be provided with not less than one automatic sprinkler to provide container cooling in case of fire.

Section 5306.2.2 One-hour interior room. Where an exterior wall cannot be provided for the room, a 1-hour interior room shall be provided and shall be a room or enclosure separated from the remainder of the building by fire barriers constructed in accordance with Section 707 of the International Building Code or horizontal assemblies constructed in accordance with Section 711 of the International Building Code, or both, with a fire resistance rating of not less than 1 hour. Openings between the room or enclosure and interior spaces shall be provided with self-closing, smoke- and draft-control assemblies having a fire protection rating of not less than 1 hour. An automatic sprinkler system shall be installed within the room. The room shall be exhausted through a duct to the exterior. Supply and exhaust ducts shall be enclosed in a 1-hour-rated shaft enclosure from the room to the exterior. Approved mechanical ventilation shall comply with the International Mechanical Code and be provided at a minimum rate of 1 cfm per square foot [0.00508 $m^3/(s \times m^2)$] of the area of the room. Where amounts exceed 1500 ft3 (42.5m3), an automatic sprinkler system shall be installed within the room.

SECTIONS 5601.1.3.1 UNLAWFUL POSSESSION OF FIREWORKS, 5601.1.3.2 INSTIGATING OR AIDING A MINOR TO VIOLATE THE ORDINANCE PROHIBITING FIREWORKS, and 5601.1.3.3 SUMMONS TO BE ISSUED FOR VIOLATION OF FIREWORKS ORDINANCE are added to read as follows:

5601.1.3.1 Unlawful possession of fireworks. It shall be unlawful for any person to have, keep, store, sell, offer for sale, give away, use, transport or manufacture fireworks or pyrotechnics of all kinds in any quantity, within the corporate limits of the City.

5601.1.3.2 Instigating or aiding a minor to violate the ordinance prohibiting fireworks. No person shall furnish money or a thing of value to a minor for the purchase of fireworks or encourage, act in conjunction with or in any manner instigate or aid a minor in the act of having, keeping, storing, selling, offering for sale, giving away, using, transporting, or manufacturing fireworks within the corporate limits of the City. Such actions shall constitute Class C misdemeanors and be punished by a fine not to exceed $2,000.00.

5601.1.3.3 Summons to be issued for violation of fireworks ordinance. A summons or notice to appear in answer to a charge of illegal possession or use of fireworks in violation of this section specifying the location of such violation, the date and time of such violation, and the name and address of the offender, may be issued by any Police Officer, Arson Investigator, Fire Inspector or by any Firemen who has been assigned to citation duties by the Fire Chief.

SECTION 5601.2 PERMIT REQUIRED is amended by adding SECTIONS 5601.2.5 CONGESTED AREAS through 5601.2.14 APPEALS TO THE BOARD OF APPEALS CONCERNING EXPLOSIVES PERMITS to read as follows:

5601.2.5 Congested areas. When explosives or explosive ingredients are stored, handled, used or transported or processed in congested mercantile, industrial, commercial or other heavily populated areas, the explosive permit must be countersigned by the Fire Chief and the Chief of Police or by a person authorized to act for each. No explosive permit for use in these areas shall be valid unless it bears the signature of each of the above-named officials.

5601.2.6 Prohibited explosives. It shall be unlawful for any person to have, keep, store, sell, offer for sale, give away, use, transport or manufacture any of the explosives listed in Section 5601.3 any quantity, within the corporate limits of the City, or to store, sell, use or offer for sale such explosives within 5000 feet beyond the City limits unless authorized by the Fire Marshal.

5601.2.7 Applicant qualifications. Only those persons who have proven to the Fire Marshal by examination or actual test or by check references of three persons not related to the applicant, or by all those means, that they are qualified to manufacture, store, handle, use, transport, or possess explosives and ingredients and who have proved to the satisfaction of the Fire Marshal that they have read, or have had read to them, and understood the provisions of this section shall be given an explosives permit. Applicants who fail the written examination may repeat the exam after 30 days. Those failing the test the second time may retake the test for the third time after 90 days. Persons failing the test three times will not be permitted to repeat test for one year from date of last test taken.

5601.2.8 Inspection required. Upon receipt of an application for a permit, special permit or certificate of fitness as required by this chapter, the Fire Marshal shall make or cause to be made an investigation to determine if all conditions of this article applying to the permit specified are fulfilled, and if the Fire Marshal shall find that the things required to be set forth and are true and that the requirements of this article are fulfilled, the permit or certificate herein mentioned shall be issued.

5601.2.9 Purpose specified. Explosive permit shall specify the purpose for which the explosives or other ingredients are to be manufactured, stored, handled, transported or possessed, and the maximum amount that will be allowed.

5601.2.10 Application for permit.

1. All applications for permits shall be in writing or submitted through the customer portal system. Government departments, firms, corporations, partnerships, contractors, or other legal entity may obtain explosive permits through a person authorized to act for or assumed legal responsibility for them.
2. The Fire Marshal shall not issue an explosive permit if he receives a written objection from the City Manager, Chief of Police or from persons authorized to act for them.
3. The Arson Division shall do a computer investigation check based on the information on the application.
4. Every person applying for a permit must be able to read and write the English language.
5. The Fire Marshal or his designate may request written comments on each permit application from the various affected City of San Antonio utilities or franchise holders. When, in the opinion of the Fire Marshal, such utility or franchise holder has a valid objection to the issuance of a permit, no permit shall be approved until such objection has been resolved to the satisfaction of the Fire Marshal or his designate.
6. When, in the opinion of the Fire Marshal or his designate, there is a substantial danger to life, health, or property in the immediate area exposed to the blasting for which a permit is being requested, said permit may be denied.

5601.2.11 Records. Permits shall be numbered consecutively on an annual basis and the Fire Marshal shall keep an accurate and complete record of all explosives permits issued.

5601.2.12 Permit limitations.

1. Explosives Handling Permits may be issued for a period, not to exceed one year from date of issuance, deemed advisable by the Fire Marshal.
2. No employee of a government department, firm, partnership or individual shall be issued an explosives handler permit unless his employer first obtains an explosives site permit.

3. An employee's explosive permit shall become void if his employer's explosive permit is revoked or expires without being renewed.
4. Permits shall be unassignable and nontransferable, and no person shall operate under, or have the benefit of, another person's permit.
5. The Fire Marshal shall revoke an explosive permit for violation of any of the provisions of this chapter. The offender shall have the right to appeal the Fire Marshal's revocation decision.
6. The death of any permittee, shall, ipso facto, immediately render the permit void, and the personal representative or heirs of the decedent must apply for a permit to cover remaining explosives or ingredients or uncompleted operations requiring a permit. If a permittee is discharged from his employment, his permit shall become immediately void and shall be delivered to his employer, who must deface it by writing across the face thereof the word "Void", together with a notation of the date and reason for the voidance, and thereafter mail or deliver it to the Fire Marshal, and the employer must at once take possession and charge of any explosives or ingredients for which the permittee was accountable. In the event of the dissolution or transfer of the business of any permittee, the successor in interest of the permittee shall immediately apply for a permit to cover any explosives, ingredients or operations relating to same.
7. In the event of the bankruptcy of a permittee, the trustee or receiver of his bankrupt estate shall immediately apply for a permit to cover any remaining explosives, ingredients, or operations relating thereto. The permit shall not pass with any forced sale or other forced transfer of explosives, ingredients, or operations covered by it, and the transferee must immediately apply for a permit to cover same.
8. Any permit that becomes void during the period for which it was issued shall be returned within ten days to the Fire Marshal and it shall be accompanied with all Photostat copies that have been made.
9. The Fire Marshal shall be notified of the loss or destruction of any valid permit.

5601.2.13 Blasting site permits.

1. Blasting permits shall be issued by the Fire Marshal and shall set forth the name of the contractor or other responsible party applying, the name of the property owner upon whose property the blasting is to be done and the location of the property. Such permit shall be valid and operative for a period not to exceed 90 days from date issued, except for quarry operation permits, which shall be issued for a period not to exceed one year.
2. The Fire Marshal shall not issue a permit to exceed 10,000 pounds of explosive materials for construction blasting, 500 electric or non-electric blasting caps for use per day at a permitted site, or 50 pounds of black powder of any kind.
3. The Fire Marshal may limit the quantity of explosives or blasting agents to be permitted at any location.
4. The Fire Marshal may defer the issuance of an explosives permit in order to make any such investigation as he deems necessary.

5601.2.14 Appeals to the board of appeals concerning explosives permits. Any person who has been refused issuance of an explosive permit or who has had his explosive permit revoked may appeal such action by notifying the chairman of the Building-related and Fire Codes Appeals and Advisory Board in writing within 10 days after he has received notice of such refusal or revocation.

SECTION 5607.1 GENERAL is amended by adding SECTION 5607.1.1 CONDITIONS OF APPROVAL to read as follows:

5607.1.1 Conditions of approval. The Fire Marshal shall set other conditions to the approval of a permit application that are necessary, in his opinion, to adequately protect the public health and safety. These conditions may include, but are not limited to, reduced allowable particle velocities, additional monitoring, increased insurance protection, hours of operation, type and amount of explosives used and engineered blasting plans.

SECTION 5607.4 RESTRICTED HOURS is repealed and replaced with SECTION 5607.4 RESTRICTED HOURS to read as follows:

5607.4 Restricted hours. Except by written approval by the Fire Marshal, no blasting operations shall be conducted on Saturdays, Sundays or legal holidays or between the hours of 5:00 p.m. and 8:00 a.m.

SECTION 5607.13.1 NOTIFICATION TO THE FIRE DEPARTMENT PRIOR TO BLASTING is added to read as follows:

5607.13.1 Notification to the fire department prior to blasting. The permit holder of the construction blast site shall call the SAFD dispatch center prior to the blast to notify them that a controlled construction blast will occur. The permit holder shall notify the Fire Department with the time and location of the blast.

SECTION 5607.14 POST-BLAST PROCEDURES is amended by adding SECTION 5607.14.1 REMOVAL OF EQUIPMENT to read as follows:

5607.14.1 Removal of equipment. All exposed blasting cap lead wires in the ground from previous shots shall be removed at the end of the workday.

SECTION 5607 BLASTING is amended by adding SECTION 5607.16 PARTICLE VELOCITY PERMITTED and SECTION 5607.17 BLAST MONITOR REQUIRED to read as follows:

5607.16 Particle velocity permitted. Peak particle velocity, airblast and flyrock requirements shall comply with NFPA 495 Chapter 11 and this code. A particle velocity of 1.7 inches per second will be the maximum velocity allowed by permit. One and seven- tenths (1.7) inches per second particle velocity or above will require the immediate suspension of blasting and corrective procedures implemented to reduce the excess velocity. The Fire Marshal may reduce this limit to adequately protect the public safety.

5607.17 Blast monitor required. A blast monitor, such as a seismic blast-recording machine, is required in connection with all permits issued inside the City limits of San Antonio unless specifically exempted by the Fire Marshal. Recordings shall comply with Bureau of Mines Standards for safety and property protection. Seismic readings for each blast shall be submitted to the Fire Marshal's office after each blast for record keeping as appropriate.

SECTION 5608.1 GENERAL is amended by adding SECTIONS 5608.1.1 PUBLIC DISPLAYS - DUTIES OF THE OPERATOR through 5608.1.5 FIRE INSPECTORS TO BE PRESENT to read as follows:

5608.1.1 Public displays - duties of the operator. The operator of a public fireworks display shall comply with the following:

1. The minimum radius of the secured area surrounding a fireworks display (the minimum safe distance between the mortar site and spectators) shall be 70 feet per shell inch of the largest shell to be fired. Spectators shall be restrained using a barrier approved by the Fire Marshal. Security officers shall be provided and assigned as approved by the Fire Marshal.

2. Fire projectiles:

   2.1. So that the range of aerial display shall be not more than 200 feet and the fireworks shall be discharged vertically from steel or other approved tubes; or

   2.2. So that they will impact in a body of water;

3. Maintain an unobstructed spatial separation of:

   3.1. 600 feet between the ignition point and a school;

   3.2. 200 feet between the ignition point and a highway, railroad, or building other than a school; and

   3.3. 50 feet between the ignition point and an overhead obstruction.

4. Discontinue the display if the wind carries fireworks debris to adjoining property; and

5. Immediately after display:

   Search the display site for unfired fireworks or fireworks debris; and

   Safely dispose of any unfired fireworks or fireworks debris in the prescribed by the Fire Marshal.

5608.1.2 Fireworks permits. Possession and use of fireworks and pyrotechnics shall be allowed in connection with a fireworks display in celebration of a recognized holiday under the following conditions:

1. The site of the display has been previously approved by the Fire Marshal;
2. The display is within 10 days of a federal, state or city holiday, and is in connection with a public holiday celebration;
3. The display is to be held under the supervision of the Fire Marshal or his representative. In addition to other violations contained in this chapter, it shall be unlawful for any person conducting such a display, or storing or moving explosives preparatory to such an event, to fail to adhere to all specifications and directions of the Fire Department representative supervising such event.

5608.1.3 Materials not to be stored in city. The material to be used for a public display authorized by this division shall not be stored within the City limits but shall be brought in on the day of the public display and then shall be taken immediately to the place of display for further handling and storage.

5608.1.4 Limitation on time and number of displays. No display authorized by this division shall be commenced prior to the hour of 1:00 P.M. nor later than 10:00 P.M. Sundays through Thursdays and no later than 11:00 P.M. on Fridays and Saturdays.; however, fireworks displays may be commenced between the hours of 10:00 P.M. on December 31 of any year and between the hours of midnight and 1:00 A.M. on January 1 of any year if such displays comply with all other requirements of this code. Any

display authorized by this division shall be completed within one hour after the time the display is commenced, and no permit shall authorize more than two displays in each 24 hours.

5608.1.5 Fire inspectors to be present. For each public display of fireworks under this division, not less than two Fire Prevention officers of the city shall be in attendance during the display. If more than two fire inspectors are required or the inspector's work takes longer than two hours, the additional expense shall be borne by the applicant for the permit at the rate per man-hour as provided for in Section 11-16(k) of the City Code. The Fire Chief may require standby firefighting unit at the expense of the applicant.

SECTION 5608.2.2 USE OF PYROTECHNICS BEFORE A PROXIMATE AUDIENCE is amended by adding SECTION 5608.2.2.1 INSIDE USE OF PYROTECHNICS to read as follows:

5608.2.2.1 Inside use of pyrotechnics. The use of pyrotechnics inside of a building shall be unlawful unless authorized and approved in writing by the Fire Marshal prior to the issuance of a permit. The Fire Marshal may require the owner or person in possession or control of the building or premises to provide without charge to the department a technical opinion and report stating whether harmful smoke would be produced and pose a health hazard to the public. The opinion and report shall be prepared by a qualified engineer, specialist, laboratory, or fire safety specialty organization acceptable to the Fire Marshal and the owner. A permit for the use of pyrotechnics shall be issued when approved by the Fire Marshal. Application for a permit shall be made in writing 10 days prior to the use of pyrotechnics.

SECTION 5608.2 PERMIT APPLICATION is amended by adding SECTIONS 5608.2.3 PROCEDURE FOR APPLYING; PERMIT FOR FIREWORKS DISPLAY through 5608.2.8 DUTIES OF PERMITTEE to read as follows:

5608.2.3 Procedure for applying; Permit for Fireworks Display. A permit applicant shall, at least 10 days before using fireworks, file with the Fire Marshal a completed permit application showing the:

1. Pyrotechnics:
    a. Business address;
    b. Proof of legal competency; and
    c. Record of previous experience with fireworks;
2. Address of the proposed display;
3. Amount, type, and class of fireworks to be used;
4. Address of the company supplying the fireworks;
5. Date of proposed display;
6. Starting and ending times of the proposed display; and
7. Diagram of the proposed display grounds, detailing:
    a. Firing points
    b. Location of buildings and highways on or adjoining the grounds;
    c. Spectator restraining lines; and
    d. Overhead obstructions.

8. Completed permit application to the Fire Marshal including the surety bond or insurance coverage required by State Law.

The Fire Marshal shall, within five days from date of the completion of the requirements in Subsection (l) of this section, approve or refuse to approve the permit. If the Fire Marshal refuses to approve issuance, he shall immediately send to the applicant by certified mail, return receipt requested, a written statement explaining the basis of the refusal.

The permittee shall notify in writing, at least 48 hours prior to consideration by the Fire Marshal, all residents within 1000 feet of a proposed fireworks site.

5608.2.4 Refusal to issue. The Fire Marshal may refuse to approve issuance of a permit if the applicant:

1. Intentionally makes a false statement as to a material matter in the permit application;
2. Is a fugitive from justice;
3. Is under a felony indictment;
4. Has been finally convicted of a felony offense within that five-year period immediately preceding the filing of the application;
5. Has been finally convicted of a misdemeanor violation of an explosives law or regulation within the two-year period immediately preceding filing of the application;
6. Held a permit issued under this article, which permit was revoked within that one-year period immediately preceding the filing of the application;
7. Has been adjudicated a mental defective; is an unlawful user of, or addicted to, a controlled substance or dangerous drug, or suffers from any other handicap, infirmity, defect, or condition which might reasonably diminish his competency to safely conduct the proposed activity or would create an unreasonable risk of injury to life or property in the performance of the proposed activity.

5608.2.5 Revocation of permit. The Fire Marshal shall revoke a permit if the permittee:

1. Intentionally makes a false statement as to a material matter in the permit application;
2. Knowingly allows another to use his permit;
3. Violates a term or condition of the permit;
4. Fails within the applicable time period to comply with an order or notice on him under this article; or
5. Fails to discharge a duty imposed on him by this Section.

The Fire Marshal shall, within five days from the date of revocation, send to the permittee by certified mail, return receipt requested, a written statement explaining the basis of the revocation.

5608.2.6 Appeal of permit refusal or revocation. If the Fire Marshal refuses to issue a permit under this section, that action is final unless the applicant or permittee, within 10 days after receiving a written notice of the action, files a written appeal with the chairman of the Board of Appeals.

5608.2.7 Bond. The permittee shall furnish a bond or certificate of insurance in the minimum amount of one million dollars. The Fire Marshal may increase the amount of the required bond or insurance when he deems it advisable.

5608.2.8 Duties of permittee. A permittee shall:

1. Upon request, make his permit available for inspection to a member of the Fire Department, Police Officer, or any other authorized person;
2. Notify the Fire Marshal of the loss or destruction of an unexpired permit, notice to be given immediately upon discovery of the loss or destruction;
3. Secure a replacement permit for that lost or destroyed;
4. Comply immediately with the Fire Marshal's order to dispose of fireworks which become hazardous during the performance of this permitted activity; and
5. Return his permit to the Fire Marshal immediately upon its expiration, together with a statement detailing the cause of expiration and the disposition of unused fireworks.

SECTION 5701.4 PERMITS is amended by adding SECTION 5701.4.1 PERMIT REQUIRED PRIOR TO INSTALLATION to read as follows:

5701.4.1 Permit required prior to installation. A tank installation permit from the Fire Department is required prior to beginning installation. Application for permit shall be accompanied by construction documents, in accordance with Section 106, for installation over the Edward's Aquifer and shall be reviewed by the Aquifer Study Division of the San Antonio Water System prior to submittal to the Fire Department for a permit.

SECTION 5703.6 PIPING SYSTEMS is amended by adding SECTION 5703.6.12 PRESSURIZED PIPING to read as follows:

5703.6.12 Pressurized piping. Where a pressurized (remote pumped) piping system is connected to a tank, the piping system shall have an approved leak detection device installed in the system to monitor for leaks in the piping.

SECTION 5704.2.7 DESIGN FABRICATION AND CONSTRUCTION REQUIREMENTS FOR TANKS is amended to read as follows:

5704.2.7 Design, fabrication and construction requirements for tanks. The design, fabrication and construction of tanks shall comply with NFPA 30. Each tank shall bear a permanent nameplate or marking indicating the standard used as the basis of design. Above ground tanks used for outdoor storage of Class I, II and IIIA liquids shall be listed and labeled in accordance with UL2085 or as *approved* by the *fire code official.* Above ground storage tanks used for the storage of Class IIIB liquids shall be listed and labeled in accordance with UL142, UL 2085, or as *approved* by the *fire code official.*

SECTION 5704.2.11.4.2 LEAK DETECTION is amended to read as follows:

5704.2.11.4.2 Leak detection. Underground storage tank systems shall be provided with an approved method of leak detection from any component of the system that is designed and installed in accordance with NFPA 30. The following are approved methods of leak detection:

1. Manual tank gauging (for tanks less than 1,000 gallons);
2. Automatic tank gauging and inventory control;
3. Vapor monitoring;
4. Groundwater monitoring;
5. Interstitial monitoring of double-wall systems;
6. Monitoring of systems with secondary containment barriers;
7. Statistical Inventory Reconciliation (SIR) - (for tanks and lines) NOTE: Documentation of performance claims for the SIR method must show the system's ability to detect releases of 0.1 g.p.h. with 95% or more probability of detection and five percent or less probability of false alarm.

SECTION 5704.2.12.2 TESTING OF UNDERGROUND TANKS is amended to read as follows:

5704.2.12.2 Testing of underground tanks. Before being covered or placed in use, tanks and piping connected to underground tanks shall be tested for tightness in the presence of the fire code official. Piping shall be tested in accordance with Section 5703.6.3. The system shall not be covered until it has been approved. Each tank shall be tested for tightness hydrostatically or pneumatically at not less than three pounds per square inch or not more than five pounds per square inch for 60 minutes. Pneumatic testing shall not be used on a tank containing flammable or combustible liquids or vapors.

SECTION 5704.2.12.2 TESTING OF UNDERGROUND TANKS is amended by adding SECTIONS 5704.2.12.2.1 EXISTING TANKS AND PIPING and 5704.2.12.2.2 ALTERNATE TEST METHOD to read as follows:

5704.2.12.2.1 Existing tanks and piping. Existing underground storage tanks and piping shall be tested for leakage every five years at the owner's or operator's expense or when the Fire Marshal has reasonable cause to believe a leak exists. A log or record shall be kept, and the log shall be made available for inspection by the Fire Marshal when requested. Notice of test shall be provided in writing to the Fire Marshal by the owner or operator.

5704.2.12.2.2 Alternate test method. The Fire Marshal may require that the standpipe method of testing for tank leaks be utilized if, in the Fire Marshal's opinion, the air pressured tests would be unlikely to detect a leak, cause damage to tank or cause expulsion of contained liquids.

SECTION 5706.2.4 PERMANENT AND TEMPORARY TANKS is amended to read as follows:

5706.2.4 Permanent and temporary tanks. The capacity of permanent above-ground tanks containing Class I or II liquids shall not exceed 1,100 gallons (4164 L). The capacity of temporary above-ground tanks containing Class I or II liquids shall not exceed ~~10,000~~ 2,000 gallons (~~37 854~~ 7 570 L). Tanks shall be of the single-compartment design.

SECTION 6107.4 PROTECTING CONTAINERS FROM VEHICLES is amended to read as follows:

6107.4 Protecting containers from vehicles. Where exposed to vehicular damage due to proximity to alleys, driveways or parking areas, LP-gas containers, regulators and piping shall be protected in accordance with ~~NFPA 58~~ Section 312 Vehicle Impact Protection.

SECTION 6109.13 PROTECTION OF CONTAINERS is amended to read as follows:

6109.13 Protection of containers. LP-gas containers shall be stored within a suitable enclosure or otherwise protected against tampering. Vehicle impact protection shall be provided as required by Section ~~6107.4~~ 312 Vehicle Impact Protection.

~~Exception: Vehicle impact protection shall not be required for protection of LP-gas containers where the containers are kept in lockable, ventilated cabinets of metal construction.~~

CHAPTER 80, REFERENCED STANDARDS, is amended by adding the following referenced standard:

NFPA 90A-21 Standard for the Installation of Air-Conditioning and Ventilating Systems

APPENDIX B, SECTION B104.2 AREA SEPARATION IS AMENDED to read as follows:

B104.2 Area separation. Portions of buildings which are separated by fire walls without openings, constructed in accordance with the International Building Code, are allowed to be considered as separate fire-flow calculation areas.

Exceptions

1. Fire-flow calculation area for open parking garages shall be determined by the area of the largest floor.
2. Where building additions are protected with an approved automatic sprinkler system and separated from the existing building by an approved Fire Barrier with minimum fire resistance ratings and protected openings as per the International Building Code, fire areas may be considered as separate.

APPENDIX B, SECTION B105, FIRE-FLOW REQUIREMENTS FOR BUILDINGS is repealed and replaced with SECT ION B105, FIRE-FLOW REQUIREMENTS FOR BUILDINGS to read as follows:

B105.1 One- and two-family dwellings.The minimum fire-flow and flow duration requirements for one- and two family dwellings having a fire-flow calculation area that does not exceed 3600 square ft (344.5 m ^{2}) shall be 1,000 gallons per minute (3785.4 L/min) for 1 hour. Fire-flow and flow duration for dwellings having a fire-flow calculation area in excess of 3,600 square feet (344.5m ^{2}) shall not be less than that specified in Table B105.1.

Exception: A reduction in required fire-flow of 50 percent, as approved, is allowed when the building is equipped with an approved automatic sprinkler system.

B105.2 Buildings other than one-and -two family dwellings. The minimum fire-flow and flow duration for buildings other than one- and two-family dwellings shall be as specified in Table B105.1.

Exception 1. Buildings equipped throughout with an approved automatic sprinkler system in accordance with Sections 903.3.1.1, 903.3.1.2, or 903.3.1.3 shall qualify for a reduction in the required fire flow

according to Table B105.2 below. Note also the minimum and maximum fire flows listed in the table for the fully sprinklered occupancies listed.

Exception 2. Non-fire sprinklered, non-combustible open parking garages meeting the requirements of the 2021 International Building Code Section 406.3 shall have a maximum required fire flow of 2,200 gpm.

TABLE B105.1 MINIMUM REQUIRED FIRE-FLOW AND FLOW DURATION FOR BUILDINGS

FIRE-FLOW CALCULATION AREA (square feet)					FIRE-FLOW (gallons per minute) [b]	FLOW DURATION (hours)
Type IA and IB [a]	Type IIA and IIIA [a]	Type IV and V-A [a]	Type IIB and IIIB [a]	~~Type V-B~~ [a]		
0-22,700	0-12,700	0-8,200	0-5,900	0-3,600	1,500	2
22,701-30,200	12,701-17,000	8,201-10,900	5,901-7,900	3,601-4,800	1,750	
30,201-38,700	17,001-21,800	10,901-12,900	7,901-9,800	4,801-6,200	2,000	
38,701-48,300	21,801-24,200	12,901-17,400	9,801-12,600	6,201-7,700	2,250	
48,301-59,000	24,201-33,200	17,401-21,300	12,601-15,400	7,701-9,40	2,500	
59,001-70,900	33,201-39,700	21,301-25,500	15,401-18,400	9,401-11,300	2,750	
70,901-83,700	39,701-47,100	25,501-30,100	18,401-21,800	11,301-13,400	3,000	3
83,701-97,700	47,101-54,900	30,101-35,200	21,801-25,900	13,401-15,600	3,250	
97,701-112,700	54,901-63,400	35,201-40,600	25,901-29,300	15,601-18,000	3,500	

112,701-128,700	63,401-72,400	40,601-46,400	29,301-33,500	18,001-20,600	3,750	
128,701-145,900	72,401-82,100	46,401-52,500	33,501-37,900	20,601-23,300	4,000	4
145,901-164,200	82,101-92,400	52,501-59,100	37,901-42,700	23,301-26,300	4,250	
164,201-183,400	92,401-103,100	59,101-66,000	42,701-47,700	26,301-29,300	4,500	
183,401-203,700	103,101-114,600	66,001-73,300	47,701-53,000	29,301-32,600	4,750	
203,701-225,200	114,601-126,700	73,301-81,100	53,001-58,600	32,601-36,000	5,000	
225,201-247,700	126,701-139,400	81,101-89,200	58,601-65,400	36,001-39,600	5,250	
247,701-271,200	139,401-152,600	89,201-97,700	65,401-70,600	39,601-43,400	5,500	
271,201-295,900	152,601-166,500	97,701-106,500	70,601-77,000	43,401-47,400	5,750	
295,901-Greater	166,501-Greater	106,501-115,800	77,001-83,700	47,401-51,500	6,000	
= =	= =	115,801-125,500	83,701-90,600	51,501-55,700	6,250	
= =	= =	125,501-135,500	90,601-97,900	55,701-60,200	6,500	
= =	= =	135,501-145,800	97,901-106,800	60,201-64,800	6,750	

— —	— —	145,801-156,700	106,801-113,200	64,801-69,600	7,000
— —	— —	156,701-167,900	113,201-121,300	69,601-74,600	7,250
— —	— —	167,901-179,400	121,301-129,600	74,601-79,800	7,500
— —	— —	179,401-191,400	129,601-138,300	79,801-85,100	7,750
— —	— —	191,401-Greater	138,301-Greater	85,101-Greater	8,000

For SI: 1 square foot = 0.0929 m^2, 1 gallon per minute = 3.785 L/m, 1 pound per square inch = 6.895 kPa.

a. Types of construction are based on the *International Building Code.*

b. Measured at 20 psi residual pressure.

TABLE B105.2—FIRE FLOW REDUCTIONS FOR FULLY SPRINKLERED BUILDINGS

Construction Type	Occupancy Type4, 5	% Reduction	Minimum (gpm)	Maximum (gpm)
All	A	75	1,500	2,000
VB, IIIB, IIB	B	50	1,500	2,200
All Others	B	50	1,500	2,000
All	E	75	1,500	2,000
VB, IIIB, IIB	F	50	1,500	2,200
All Others	F	50	1,500	2,000

All	H-1	See Footnotes	1,500	See Footnotes
All	H-2	See Footnotes	1,500	See Footnotes
All	H-3	See Footnotes	1,500	See Footnotes
All	H-4	See Footnotes	1,500	See Footnotes
All	H-5	See Footnotes	1,500	See Footnotes
All	I	75	1,500	2,000
VB, IIIB, IIB	M	50	1,500	2,200
All Others	M	50	1,500	2,000
All	R	50	1,500	2,000
All except VB2	S-1 not high piled	50	1,500	2,200
All except VB2	S-1 high piled Class I-IV commodities, ≤ 12,000 sq ft.		Greater of Approved Sprinkler Demand3 (ASD) or 1,500 gpm	
All except VB2	S-1 high piled Class I-IV commodities, >12,000 sq ft		Greater of 2,200 gpm or the ASD + 25%	
All except VB2	S-1 high piled Class V commodities, ≤ 2,500 sq ft.		Greater of 1,500 gpm or the ASD	
All except VB2	S-1 high piled Class V commodities, 2,501-6,000 sq ft		Greater of 1,500 gpm or the ASD + 500 gpm	
All except VB2	S-1 high piled Class V commodities, >6,000 sq ft		Greater of 2,200 gpm or the ASD + 1,000 gpm	
All except VB2	S-1 Aircraft			
Hangers, Helistops	50	1,500	2,200	

All except VB2	S-2	50	1,500	2,200

Footnotes:

1. As determined by Fire Marshal on a case-by-case basis.
2. These occupancies that are constructed of Type VB construction shall not be granted a reduction in the required fire flow due to the installation of a fire sprinkler system.
3. Approved sprinkler demand (ASD) is the sprinkler demand as defined in NFPA or other nationally recognized standards and includes the hose stream demand. When multiple sprinkler systems are in one building, the approved sprinkler demand shall be the greatest sprinkler demand (including hose stream demand).
4. Occupancies containing High Piled Combustible Storage as defined in Chapter 32 shall be evaluated using the criteria for S-1 occupancies.
5. Mixed-use occupancies shall be evaluated for the most restrictive occupancy present in the building.

B105.3 FIRE-FLOW REQUIREMENTS FOR HYDRANTS PROTECTING CERTAIN ABOVE GROUND FLAMMABLE AND COMBUSTIBLE LIQUID STORAGE TANKS. The minimum required fire flow for above ground storage tanks used for the storage of Class I, II, and IIIA liquid fuels in excess of 12,000 gallons, storage tank farms with an aggregate capacity of 48,000 gallons or greater, or for refineries shall be a minimum 2000 gallons per minute unless approved by the fire code official.

APPENDIX C, FIRE HYDRANT LOCATIONS AND DISTRIBUTION is hereby amended by amending TABLE C102.1 REQUIRED NUMBER AND SPACING OF FIRE HYDRANTS to read as follows:

TABLE C102.1 Number and Distribution of Fire Hydrants

PRE-FLOW REQUIREMENT (gpm)	MINIMUM NUMBER OF HYDRANTS
1,750 or less	1
2,000-2,250	2
2,500	3
3,000	3
3,500-4,000	4
4,500-5,000	5
5,500	6
6,000	6

6,500-7,000	7
7,500 or more	8 or more

For SI: 1foot= 304.8 mm, 1 gallon per minute = 3.785L/m.

a. Reduce by 100 feet for dead-end streets or roads.
b. Where streets are provided with median dividers which cannot be crossed by fire fighters pulling hose lines, or where arterial streets are provided with four or more traffic lanes and have a traffic count of more than 30,000 vehicles per day, hydrant spacing shall average 500 feet on each side of the street and be arranged on an alternating basis up to a fire-flow requirement of 7,000 gallons per minute and 400 feet for higher fire-flow requirements.
c. Where new water mains are extended along streets where hydrants are not needed for protection of structures of similar fire problems, fire hydrants shall be provided at spacing not to exceed 1,000 feet to provide for transportation hazards.
d. Reduce by 50 feet for dead-end streets or roads.
e. One hydrant for each 1, 000 gallons per minute or fraction thereof

APPENDIX D

FIRE APPARATUS ACCESS ROADS

APPENDIX D SECTION D103.5 FIRE APPARATUS ACCESS ROAD GATES is amended to read as follows:

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

1. Where a single gate is provided, the gate width shall be not less than 20 feet (6096 mm). Where a fire apparatus road consists of a divided roadway, the gate width shall be not less than ~~12~~ 14 feet ~~(3658 mm)~~.
2. Gates shall be of the swinging or sliding ~~horizontal swing, horizontal slide, vertical lift or vertical pivot~~ type.
3. Construction of gates shall be of materials that allow manual operation by one person.
4. Gate components shall be maintained in an operative condition at all times and replaced or repaired when defective.
5. Electric gates shall be equipped with a means of opening the gate by fire department personnel for emergency access. Emergency opening devices shall be approved by the fire code official.
6. Methods of locking shall be submitted for approval by the fire code official.
7. Electric gate operators, where provided, shall be listed in accordance with UL 325.
8. Gates intended for automatic operation shall be designed, constructed and installed to comply with the requirements of ASTM F2200.

APPENDIX D SECTIONS D103.6.1 ROADS 20 TO 26 FEET IN WIDTH and D103.6. 2 ROADS MORE THAN 26 FEET IN WIDTH are repealed and replaced with SECTIONS D103.6.1 ROADS 20 TO 26 FEET IN WIDTH and D103.6.2 ROADS MORE THAN 26 FEET IN WIDTH to read as follows:

D103.6.1 Roads 20 to 26 feet in width. Fire lane signs in accordance with Section 503.3 of this code shall be posted on both sides of fire apparatus access roads that are 20 to 26 feet wide (6096 to 7925 mm).

D103.6.2 Roads more than 26 feet in width. Fire lane signs in accordance with Section 503.3 of this code shall be posted on one side of fire apparatus access roads more than 26 feet wide (7925 mm) and less than 32 feet wide (9754 mm).

APPENDIX D SECTION D104.1 BUILDINGS EXCEEDING THREE STORIES OR 30 FEET IN HEIGHT is repealed.

APPENDIX D SECTION D105.1 WHERE REQUIRED is amended to read as follows:

D105.1 Where required. Where the vertical distance between the grade plane and the highest roof surface exceeds 30 feet (9144 mm), approved aerial fire apparatus access roads shall be provided. For the purposes of this section, the highest roof surface shall be determined by measurement to the eave of a pitched roof, the intersection of the roof to the exterior wall, or the top of parapet walls, whichever is greater.

~~**Exception**: Where approved by the fire code official, buildings of Type IA, Type IB or Type IIA construction equipped throughout with an automatic sprinkler system is accordance with Section 903.3.1.1 and having firefighter access through an enclosed stairway with a Class I standpipe from the lowest level of fire department vehicle access to all roof surfaces.~~

Exceptions:

1. In other than Group R only buildings, aerial fire apparatus access roads per this section are not required where all of the following conditions are met:
   a. the building is equipped throughout with an approved automatic sprinkler system in accordance with Section 903.3.1.1, and
   b. roof access from an enclosed stairwell is provided for buildings 2 or more stories in height. Stairwell must be contiguous from the lowest level of fire department vehicle access to the roof and designed in accordance with the 2021 International Building Code, and
   c. any required fire apparatus access roads and fire lanes are designed with a minimum 25-foot width and provided throughout the platted property.
2. In Group R only buildings, aerial fire apparatus access roads per this section are not required where all of the following conditions are met:
   a. the building is no more than four stories in height, and
   b. the building is protected by an approved automatic sprinkler system in accordance with Section 903.3.1, and
   c. the building meets the allowable area provisions of Chapter 5 of the *International Building Code* without the use of the area increase factor due to sprinkler protection. (Note: Refer to IBC Equation 5-1.)

APPENDIX D SECTION D105.2 WIDTH is amended to read as follows:

D105.2 Width. Aerial fire apparatus access roads shall have a minimum unobstructed width of 26 feet, exclusive of shoulders, in the immediate vicinity of the building or portion thereof.

Exception: An aerial apparatus access lane may be less than twenty-six (26) ft wide where a minimum 25ft wide fire lane or fire apparatus access road is provided throughout the platted property.

APPENDIX D SECTION D105.3 PROXIMITY TO BUILDING is amended to read as follows:

D105.3 Proximity to building. ~~One or more~~ At least one of the required access routes meeting this condition shall be located ~~not less than~~ within a minimum of 15 feet (4572 mm) and a maximum of ~~39 not greater than 30~~ feet ~~(9144 mm)~~ from the building. ~~and~~ The road shall be positioned parallel to ~~one entire side of the building~~ the side(s) where the aerial access equipment will have maximum use and access by the fire department. The side of the building on which the aerial fire apparatus access road is positioned shall be approved by the fire code official. The length of the aerial apparatus road shall total at least one of the following:

1. The entire length of one side of the building provided the length is a minimum of 50 feet, or
2. 25% of the entire building perimeter.

Appendix D FIRE APPARATUS ACCESS ROADS is hereby amended by adding SECTION D106.4 SEPARATE ACCESS ROADS to read as follows:

D106.4 Separate access roads. The requirement for two separate and approved fire apparatus access roads are met with the following conditions:

1. A minimum of two separate entrances into the complex are made from the street or public way.
2. The distance between the two entrances are equal to not less than one half the length of the maximum overall diagonal dimension of the property or area to be served, measured in a straight line between accesses, as per 2021 IFC, section D104.3.
   Exception: Where it is physically impossible to be one-half the diagonal dimension apart, the access road will be approved if the following conditions are met:
   a. The two separate fire apparatus access road must be separated as far as physically and practically possible.
   b. The two separate entrances must be a minimum of 150 feet apart measured in a straight line between accesses.
3. The two separate entrances are allowed to share a common path of travel on the complex site so long as blockage in any one area of this path does not block access from both the primary and secondary access simultaneously. Each of the two separate fire apparatus roads shall meet the requirements of the 2021 IFC,Section 503, Fire Apparatus Access Roads.

SECTION D107
ONE- OR TWO- FAMILY RESIDENTIAL DEVELOPMENTS

APPENDIX D SECTION D107.1 ONE- OR TWO- FAMILY RESIDENTIAL DEVELOPMENTS is amended to read as follows:

D107.1 One or two-family dwelling residential developments. Developments of one- or two- family dwellings where the number of dwelling units exceeds 30 shall be provided with two separate and approved fire apparatus access roads.

Exceptions:

1. Where there are more than 30 dwelling units accessed from a single public or private fire apparatus access road and all dwelling units are equipped throughout with an approved automatic sprinkler system in accordance with Section 903.3.1.1, 903.3.1.2 or 903.3.1.3, access from two directions shall not be required.
2. The number of dwelling units accessed from a single fire apparatus access road shall not be increased unless fire apparatus access roads will connect with future development, as determined by the fire code official.
3. Developments of more than 30 dwelling units but less than 126 dwelling units shall not require a separate and remote fire apparatus access road where;
    a. a divided entrance with a minimum of 24 feet per side is provided, and
    b. the divided entrance is connected to a minimum 30 foot wide, with no parking on either side, fire apparatus access road of no greater than 450 feet in length, and
    c. is connected to a looped street configuration as approved by the fire code official.
4. Developments of more than 30 dwelling units but less than 126 dwelling units having a secondary, all weather, gated access, that is utilized by emergency vehicles only meeting the remoteness requirements in Section D107.2 are considered in compliance with this section.

APPENDIX M HIGH-RISE BUILDINGS - RETROACTIVE AUTOMATIC SPRINKLER REQUIREMENT is repealed and replaced with APPENDIX M HIGH-RISE BUILDINGS - AUTOMATIC SPRINKLER RETROFIT REQUIREMENT to read as follows:

APPENDIX M

HIGH-RISE BUILDINGS—AUTOMATIC SPRINKLER RETROFIT REQUIREMENT

SECTION M101
SCOPE

M101.1 Scope. An automatic sprinkler system shall be installed in all existing high-rise buildings in accordance with the requirements and compliance schedule of this appendix.

SECTION M102
DEFINITION

M102.1 Definition. High-rise building is defined in Chapter 2 of the International Fire Code.

SECTION M103
WHERE REQUIRED

M103.1 High-rise buildings. An automatic sprinkler system installed in accordance with Section 903.3.1.1 of the adopted International Fire Code shall be provided throughout existing high-rise buildings.

Exceptions:

1. Airport Control Towers
2. Open Parking Structures
3. Group U occupancies

4. Occupancies in Group F-2
5. Buildings with an occupancy in Assembly Group A-5
6. Individually owned dwelling units in high-rise buildings

SECTION M104
COMPLIANCE

M104.1 Letter of intent. By January 1, 2017, owners of existing high-rise buildings must have submitted to the fire code official a letter expressing the owner's intent to comply with this section.

M104.2 Compliance schedule. Building owners shall file a compliance schedule with the fire code official not later than October 1, 2021. The compliance schedule shall not exceed twelve (12) years for an automatic sprinkler system retrofit and shall comply with the following schedule for installation.

1. Not later than October 1, 2024, the building owner shall install a water supply for the automatic sprinkler system on all floors of the high-rise building in accordance with the adopted standards of the International Fire Code.

2. Not later than October 1, 2027, the building owner shall install an automatic sprinkler system in accordance with the adopted standards of the International Fire Code on 50% of the floors of the building.

3. Not later than October 1, 2030, the building owner shall install an automatic sprinkler system in accordance with the adopted standards of the International Fire Code on all floors of the building.

M104.3 Alternate Compliance Schedule for Multi-Building Owners. Owners of multiple high-rise buildings are considered to have met the requirements of Appendix M if a fire sprinkler system has been installed on all floors of:

1. at least 33 percent of the owner's high-rise buildings not later October 1, 2024;
2. at least 66 percent of the owner's high-rise buildings not later than October 1, 2027; and
3. all of the owner's high-rise buildings not later than October 1, 2030.

M104.4 Compliance with state law. Owners of applicable residential high-rise buildings must comply with Health and Safety Code, Chapter 766, Subchapter B. Fire Protection Sprinkler Systems in Certain Residential High-Rise Buildings in Certain Counties.

SECTION M105
REFERENCED STANDARDS

ICC IFC-15 International Fire Code M102.1