

ARTICLE I. - GENERAL PROVISIONS

Sec. 7-1. - General Amendments to Codes.

Any provision of the code herein adopted that refers to the Construction Board of Adjustment and Appeals means the Building Standards Commission as established by the Code of Ordinances.

Sec. 7-2. - Residential Driveways.

Concrete driveways on single-family and duplex residential lots shall be constructed with a minimum thickness of 4½ inches and be reinforced with a minimum of number three grade 60 deformed steel bar conforming to ASTM A615, spaced at 18 inches on center each way with a minimum of 2-inch sand cushion. The concrete must be able to achieve a minimum compressive strength of 3,000 pounds per square inch in 28 days. Driveways shall include doweled expansion joints at maximum 40-foot spacing and contraction (crack control) joints at maximum 20-foot spacing.

Sec. 7-3. - ~~Wind Speed Design Reserved.~~

~~Wind speed design on building or structure shall meet a minimum of 110 mph (3-second gust) or greater, if required by the Building or Residential Code.~~

Sec. 7-4. - Moderate-Hazard Storage, Group S-1.

Storage Group S-1 moderate-hazard storage occupancies shall require a rating of not less than the Building and Fire Code requirements for Group S-2 low hazard storage occupancy.

ARTICLE II. - BUILDINGS

Sec. 7-14. - Code Adopted.

Except as amended in this Article, the International Building Code, ~~2015~~ 2021 edition, as published by the International Code Council, is adopted.

Sec. 7-14.1. - Appendix Adopted.

Except as amended in this Article, Appendix K of the International Building Code, ~~2015~~ 2021 edition, is adopted.

Sec. 7-15. - Code Deletions.

The following parts of the International Building Code are deleted:

Paragraph 105.1.1

Paragraph 105.1.2

Section 113

Subsection 114.2

Subsection 114.3

Subsection 116.3

Subsection 116.4

Subsections ~~1101.2—1111.4.2~~ 1102.1-1112.5.2

Subsection 1507.8

Subsection 1507.9

Sec. 7-16. - Code Amendments.

The following sections of the ~~2015~~ 2021 International Building Code are amended as follows:

Subsection 101.1 is amended to read as follows:

101.1 Title. These regulations shall be known as the Building Code of the City of Sugar Land, hereinafter referred to as "this code."

Subsection 103.1 is amended to read as follows:

103.1. Enforcement authority. The official in charge of the implementation, administration, and enforcement of this code will be known as the building official.

Subsection 104.3 is amended to read as follows:

104.3. Notices and orders. The building official may issue necessary notices or orders to ensure compliance with this code.

Subsection 105.2 is amended to read as follows:

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

Building:

1. Oil derricks.
2. Painting, papering, tiling, carpeting, cabinets, counter tops and similar finish work.
3. Temporary motion picture, television and theater stage sets and scenery.
4. Prefabricated swimming pools accessory to a Group R-3 occupancy that are less than 24 inches (610 mm) deep, are not greater than 5,000 gallons (18,925 L) and are installed entirely above ground.
5. Shade cloth structures constructed for nursery or agricultural purposes, not including service systems.
6. Swings and other playground equipment accessory to detached one- and two-family dwellings.
7. Non-fixed and movable fixtures, cases, racks, counters and partitions not over 5 feet 9 inches (1,753 mm) in height.
8. Solar pergolas.

Electrical:

Repairs and maintenance: Minor repair work, including the replacement of lamps or the connection of approved portable electrical equipment to approved permanently installed receptacles.

Radio and television transmitting stations: The provisions of this code 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.

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

Gas:

1. Portable heating appliance.
2. Replacement of any minor part that does not alter approval of equipment or make such equipment unsafe.

Mechanical:

1. Portable heating appliance.
2. Portable ventilation equipment.
3. Portable cooling unit.
4. Steam, hot or chilled water piping within any heating or cooling equipment regulated by this code.
5. Replacement of any part that does not alter its approval or make it unsafe.
6. Portable evaporative cooler.
7. Self-contained refrigeration system containing 10 pounds (4.54 kg) or less of refrigerant and actuated by motors of 1 horsepower (0.75 KW) or less.

Plumbing:

1. 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 code.
2. 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.

Section 105 is amended by adding Subsection 105.8 to read as follows:

105.8. Insurance Required. As a condition to the issuance of the permit, the contractor shall certify that the contractor has: Workers' Compensation insurance as required by law; general liability insurance of at least \$100,000.00 for any one accident for property damage and \$300,000.00 for any one person for injuries or death; and \$5,000.00 for medical expenses for any one person.

Subsection 1101.1 is amended to read as follows:

1101.1. Scope. Buildings and facilities shall be designed and constructed to be accessible in accordance with Chapter 469 of the Texas Government Code, the Texas Architectural Barriers Act, and the Texas Accessibility Standards.

Subsection 1612.3 is amended to read as follows:

1612.3 Establishment of flood hazard areas. To establish flood hazard areas, the City Council shall adopt a flood hazard map(s) and supporting data. The flood hazard map(s) shall include, at a minimum, areas of special flood hazard as set forth in section 8-12 of the Development Code. The flood hazard map(s) and supporting data adopted pursuant to section 8-12 of the Development Code are adopted and declared to be part of this section

Subsection K110.1 is amended to read as follows:

K110.1. Authority to condemn electrical systems. Wherever the building official determines that any electrical system, or portion thereof, regulated by this code has become hazardous to life, health or property, the building official may order in writing that such electrical systems either be removed or restored to a safe condition. A time limit for compliance with such order may be specified in the written notice. A person shall not use or maintain a defective electrical system or equipment after receiving such notice. In cases of immediate danger to life or property, such disconnection shall be made immediately without such notice.

ARTICLE II-A. - EXISTING BUILDING CODE

Sec. 7-17. - Code Adopted.

Except as amended in this Article, the International Existing Building Code, ~~2015~~ 2021 edition, as published by the International Code Council, is adopted.

Sec. 7-18. - Code Deletions.

The following sections of the International Existing Building Code ~~is~~ are deleted:

Section 112

Subsection 113.2

Subsection 113.4

Subsection 115.3

Subsection 115.4

Subsection 117.2

Sec. 7-19. - Code Amendments.

The following sections of the International Existing Building Code ~~is~~ are amended as follows:

Subsection 101.1 is amended to read as follows:

101.1. Title. These regulations shall be known as the Existing Building Code of the City of Sugar Land, hereinafter referred to as "this code."

Subsection 103.1 is amended to read as follows:

103.1. Enforcement authority. The official in charge of the implementation, administration, and enforcement of this code will be known as the code official.

Subsection 104.3 is amended to read as follows:

104.3. Notices and orders. The code official may issue necessary notices or orders to ensure compliance with this code.

Section 105 is amended by adding Subsection 105.8 to read as follows:

105.8. Insurance Required. As a condition to the issuance of the permit, the contractor shall certify that the contractor has: Workers' Compensation insurance as required by law; general liability insurance of at least \$100,000.00 for any one accident for property damage and \$300,000.00 for any one person for injuries or death; and \$5,000.00 for medical expenses for any one person.

Sec. 7-20. - Reserved.

ARTICLE III. - ELECTRICAL

Sec. 7-21. - Code Adopted.

Except as amended in this Article, the National Electrical Code, ~~2014~~ 2020 edition, as published by the National Fire Protection Association is adopted.

Sec. 7-22. - Code Amendments.

The following parts of ~~2014~~ 2020 National Electrical Code are amended:

Subsection 230.30 is amended to read as follows:

230.30. Installation.

- (A) All direct buried cables and conductors shall be installed in an approved conduit or raceway.
- (B) Insulation. Underground service conductors shall be insulated for the applied voltage.

Exception: A grounded conductor shall be permitted to be uninsulated as follows:

- (1) Bare copper used in a raceway
- (2) Bare copper for direct burial where bare copper is approved for the soil conditions
- (3) Bare copper for direct burial without regard to soil conditions where part of a cable assembly identified for underground use
- (4) Aluminum or copper-clad aluminum without individual insulation or covering where part of a cable assembly identified for underground use in a raceway or for direct burial
- (C) Wiring Methods. Underground service conductors shall be installed in accordance with the applicable requirements of this Code covering the type of wiring method used and shall be limited to the following methods:
 - (1) RMC conduit
 - (2) IMC conduit
 - (3) Type NUCC conduit
 - (4) HDPE conduit
 - (5) PVC conduit
 - (6) RTRC conduit
 - (7) Type IGS cable
 - (8) Type USE conductors or cables
 - (9) Type MV or Type MC cable identified for direct burial applications
 - (10) Type MI cable where suitably protected against physical damage and corrosive conditions
 - (11) Type TC-ER cable where identified for service entrance use and direct burial applications

Paragraph 300.5(D) is amended to read as follows:

- (D) Protection from Damage. Direct buried conductors and cables shall be installed in an approved conduit or raceway.

Table 300.5 is amended to read as follows:

Table 300.5
Minimum Cover Requirements, 0 to 1000 Volts, Burial in Inches

<u>LOCATION OF WIRING METHOD OR CIRCUIT</u>	<u>TYPE OF WIRING METHOD OR CIRCUIT</u>				
	<u>Column 1</u> <u>Direct Burial Cables or Conductors</u>	<u>Column 2</u> <u>Rigid Metal Conduit or Intermediate Metal Conduit</u>	<u>Column 3</u> <u>Nonmetallic Raceways Listed for Direct Burial Without Concrete Encasement or Other Approved Raceways</u>	<u>Column 4</u> <u>Residential Branch Circuits Rated 120 Volts or Less With GFCI protection and Maximum Overcurrent Protection of 20 Amperes</u>	<u>Column 5</u> <u>Circuits for Control of Irrigation and Landscape Lighting Limited to Not More Than 30 Volts and Installed with Type UF or in Other Identified Cable or Raceway</u>
<u>All locations not specified below</u>	<u>24°</u>	<u>6</u>	<u>18</u>	<u>12</u>	<u>6^{a, b}</u>
<u>In trench below 2-inch-thick concrete or equivalent</u>	<u>18°</u>	<u>6</u>	<u>12</u>	<u>6</u>	<u>6</u>
<u>Under a building</u>	<u>0</u> <u>(In raceway only or Type MC identified for direct burial)</u>	<u>0</u>	<u>0</u>	<u>0</u> <u>(In raceway only or Type MC identified for direct burial)</u>	<u>0</u> <u>(In raceway only or Type MC identified for direct burial)</u>
<u>Under minimum of 4-inch-thick concrete exterior slab with no vehicular traffic and the slab extending not less than 6 inches beyond the underground installation</u>	<u>18°</u>	<u>4</u>	<u>4</u>	<u>6 (Direct burial)</u> <u>4 (In raceway)</u>	<u>6 (Direct burial)</u> <u>4 (In raceway)</u>
<u>Under streets, highways, roads, alleys, driveways and parking lots</u>	<u>24°</u>	<u>24</u>	<u>24</u>	<u>24</u>	<u>24</u>
<u>One- and two-family dwelling driveways and outdoor parking areas, and used only for dwelling-related purposes</u>	<u>18°</u>	<u>18</u>	<u>18</u>	<u>12</u>	<u>18</u>
<u>In solid rock where covered by minimum of 2 inches concrete extending down to rock</u>	<u>2 (In raceway only)</u>	<u>2</u>	<u>2</u>	<u>2 (In raceway only)</u>	<u>2 (In raceway only)</u>

- a. A lesser depth shall be permitted where specified in the installation instructions of a listed low-voltage lighting system.
b. A depth of 6 inches shall be permitted for pool, spa, and fountain lighting that is installed in a nonmetallic raceway, limited to not more than 30 volts and part of a listed low-voltage lighting system.
c. Direct buried cables or conductors shall be installed in an approved conduit or raceway.

Notes:

- Cover is defined as the shortest distance in inches measured between a point on the top surface of any direct-buried conductor, cable, conduit or other raceway and the top surface of finished grade, concrete, or similar cover.
- Raceways approved for burial only where encased concrete shall require concrete envelope not less than 2 inches thick.
- Lesser depths shall be permitted where cables and conductors rise for terminations or splices or where access is otherwise required.
- Where one of the wiring method types listed in Columns 1 through 3 is combined with one of the circuit types in Columns 4 and 5, the shallower depth of burial shall be permitted.
- Where solid rock prevents compliance with the cover depths specified in this table, the wiring shall be installed in metal or nonmetallic raceway permitted for direct burial. The raceways shall be covered by a minimum of 2 inches of concrete extending down to the rock.

310.106(B) Conductor Material. ~~Conductors in this article shall be of copper-clad aluminum, copper, or aluminum in sizes 1/0 or larger, unless otherwise stated.~~

Table 310.106(A): ~~The indicated minimum conductor size is amended to read as follows:-~~

Table 310.106(A) Minimum Size of Conductors
Minimum Conductor Size (AWG)

<p>Table 310.106(A) Minimum Size of Conductors Minimum Conductor Size (AWG)</p>

Conductor Voltage Rating (Volts)	Copper	Aluminum or Copper-Clad Aluminum
0—2000	12	(intentionally deleted)
2001—5000	8	(intentionally deleted)
5001—8000	6	(intentionally deleted)
8001—15,000	2	(intentionally deleted)
15,001—28,000	4	(intentionally deleted)
28,001—35,000	1/0	1/0

~~310.10(F): That part of 310.10(F) that reads "Cables rated above two thousand (2,000) volts shall be shielded" is amended to read, "Cables carrying more than fifty (50) volts shall be shielded."~~

Secs. 7-23-7-25. - Reserved.

ARTICLE IV. – GAS

Sec. 7-26. - Code Adopted.

Except as amended in this Article, the International Fuel Gas Code, ~~2015~~ 2021 edition, as published by the International Code Council, is adopted.

Sec. 7-27. - Code Deletions.

The following section of the International Fuel Gas Code is deleted:

Section ~~409~~ 113

Section 114

Subsection 115.2

Subsection 115.3

Subsection 115.4

Subsection 115.5

Sec. 7-28. - Code Amendments.

The following sections of the International Fuel Gas Code is ~~is~~ are amended as follows:

Subsection 101.1 is amended to read as follows:

101.1. Title. These regulations shall be known as the Fuel Gas Code of the City of Sugar Land, hereinafter referred to as "this code."

Subsection 103.1 is amended to read as follows:

103.1. Enforcement authority. The official in charge of the implementation, administration, and enforcement of this code will be known as the code official.

Section 104.6 is amended to read as follows:

104.6. Notices and orders. The code official may issue all necessary notices or orders to ensure compliance with this code.

Section 106 is amended by adding Subsection 106.6 to read as follows:

106.6. Insurance Required. As a condition to the issuance of the permit, the contractor shall certify that the contractor has: Workers' Compensation insurance as required by law; general liability insurance of at least \$100,000.00 for any one accident for property damage and \$300,000.00 for any one person for injuries or death; and \$5,000.00 for medical expenses for any one person.

Paragraph 115.6.1 is amended to read as follows:

115.6.1. Authority to condemn installations. Whenever the code official determines that any installation, or portion thereof, regulated by this code has become hazardous to life, health or property, he or she may order in writing that such installations either be removed or

restored to a safe condition. A time limit for compliance with such order may be specified in the written notice. A person shall not use or maintain a defective installation after receiving such notice. In cases of immediate danger to life or property, such disconnection shall be made immediately without such notice.

Paragraph 115.6.3 is amended to read as follows:

115.6.3. Connection after order to disconnect. A person shall not make energy source connections to installations regulated by this code that 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 installations. Where an installation is maintained in violation of this code, the code official may institute appropriate action to prevent, restrain, correct or abate the violation.

Subsection 406.4 is amended to read as follows:

406.4. Test pressure measurement. Test pressure shall be measured with a manometer or with a pressure-measuring device designed and calibrated to read, record or indicate a pressure loss caused by leakage during the pressure test period. Spring type test gauges are not permitted. The source of pressure shall be isolated before the pressure tests are made. Mechanical gauges used to measure test pressures shall have a range such that the highest end of the scale is not greater than five times the test pressure.

Secs. 7-29, 7-30. - Reserved.

ARTICLE V. - MECHANICAL

Sec. 7-31. - Code Adopted.

Except as amended in this Article, the International Mechanical Code, ~~2015~~ 2021 edition, as published by the International Code Council is adopted.

Sec. 7-32. - Code Deletions.

The following sections of the International Mechanical Code ~~is~~ are deleted:

Section 113

Section ~~409~~ 114

Subsection 115.2

Subsection 115.3

Subsection 115.4

Subsection 115.5

Sec. 7-33. - Code Amendments.

The following section of the International Mechanical Code is amended as follows:

Subsection 101.1 is amended to read as follows:

101.1 Title. These regulations shall be known as the Mechanical Code of the City of Sugar Land, hereinafter referred to as "this code."

Subsection 103.1 is amended to read as follows:

103.1. Enforcement authority. The official in charge of the implementation, administration, and enforcement of this code will be known as the code official.

Subsection 104.6 is amended to read as follows:

104.6. Notices and orders. The code official may issue all necessary notices or orders to ensure compliance with this code.

Section 106 is amended by adding Subsection 106.5 to read as follows:

106.5. Insurance Required. As a condition to the issuance of the permit, the contractor shall certify that the contractor has: Workers' Compensation insurance as required by law; general liability insurance of at least \$100,000.00 for any one accident for property damage and \$300,000.00 for any one person for injuries or death; and \$5,000.00 for medical expenses for any one person.

Paragraph 115.6.1 is amended to read as follows:

115.6.1. Authority to condemn mechanical systems. Where the code official determines that any mechanical system, or portion thereof, regulated by this code has become

hazardous to life, health, property, or has become insanitary, the code official may order in writing that such system either be removed or restored to a safe condition. A time limit for compliance with such order may be specified in the written notice. A person shall not use or maintain a defective mechanical system after receiving such notice. In cases of immediate danger to life or property, such disconnection shall be made immediately without such notice.

Paragraph 115.6.3 is amended to read as follows:

115.6.3 Connection after order to disconnect. A person shall not make energy source connections to mechanical systems regulated by this code that 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 mechanical systems. Where a mechanical system is maintained in violation of this code, the code official may institute appropriate action to prevent, restrain, correct or abate the violation.

Subparagraph 506.3.2.5 is amended to read as follows:

506.3.2.5 Grease duct test. Prior to the use or concealment of any portion of a grease duct system, a leakage test shall be performed. Ducts shall be considered to be concealed where installed in shafts or covered by coatings or wraps that prevent the ductwork from being visually inspected on all sides. The permit holder shall be responsible for providing the necessary equipment and performing the grease duct leakage test. A duct leakage test, in accordance with this section, shall be performed for the entire duct system, including the hood-to-duct connection. The duct work may be tested in sections, provided that every joint is tested.

To determine the tightness of the grease duct construction, a smoke test shall be made in accordance with the following conditions and requirements:

1. The test shall be performed in the presence of the building inspector.
2. The grease duct shall be filled with a thick penetrating smoke produced by one or more smoke machines, or smoke bombs. The test shall be applied for a length of time sufficient to permit the inspection of the grease duct.
3. If the test shows any evidence of leakage or other defects, such defects shall be corrected in accordance with the requirements of this chapter, and the test shall be repeated until there is no visible smoke observed.

Secs. 7-34, 7-35. Reserved.

ARTICLE VI. – PLUMBING

Sec. 7-36. - Code Adopted.

Except as amended in this Article, the International Plumbing Code, ~~2015~~ 2021 edition, as published by the International Code Council, is adopted.

Sec. 7-37. - Code Deletions.

The following sections of the International Plumbing Code are deleted:

Section 113

Section ~~409~~ 114

Subsection 115.2

Subsection 115.3

Subsection 115.4

Subsection 115.5

Paragraph ~~705.11.2~~

Sec. 7-38. - Code Amendments.

The following sections of the International Plumbing Code are amended as follows:

Section 101.1 is amended to read as follows:

101.1. Title. These regulations shall be known as the International Plumbing Code of the City of Sugar Land, hereinafter referred to as "this code".

Subsection 103.1 is amended to read as follows:

103.1 Enforcement authority. The official in charge of the implementation, administration, and enforcement of this code will be known as the code official.

Section 104.6 is amended to read as follows:

104.6. Notices and orders. The code official may issue all necessary notices or orders to ensure compliance with this code.

Section 106 is amended by adding Subsection 106.6 to read as follows:

106.6. Insurance Required. As a condition to the issuance of the permit, the contractor shall certify that the contractor has: Workers' Compensation insurance as required by law; general liability insurance of at least \$100,000.00 for any one accident for property damage and \$300,000.00 for any one person for injuries or death; and \$5,000.00 for medical expenses for any one person.

Paragraph 115.6.1 is amended to read as follows:

115.6.1. Authority to condemn equipment. Where the code official determines that any plumbing, or portion thereof, regulated by this code has become hazardous to life, health or property or has become unsanitary, the code official may order in writing that such plumbing either be removed or restored to a safe or sanitary condition. A time limit for compliance with such order may be specified in the written notice. A person shall not use or maintain defective plumbing after receiving such notice. In cases of immediate danger to life or property, such disconnection shall be made immediately without such notice.

Paragraph 115.6.3 is amended to read as follows:

115.6.3. Connection after order to disconnect. A person shall not make connections from any energy, fuel, power supply or water distribution system or supply energy, fuel or water to any equipment regulated by this code that has 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 equipment. Where any plumbing is maintained in violation of this code, the code official may institute any appropriate action to prevent, restrain, correct or abate the violation.

~~Section 504.6(5) is amended to read as follows:~~

~~504.6(5) Discharge to a waste receptor, the outdoors or an approved location.~~

Paragraph 504.7.2 is amended to read as follows:

504.7.2. Pan drain termination. The pan drain shall extend full size and terminate over a suitably located indirect waste receptor or floor drain or extend to the exterior of the building and terminate not less than 6 inches (152 mm) and not more than 24 inches (610 mm) above the adjacent ground surface. Where a pan drain was not previously installed, a pan drain shall not be required for a replacement water heater installation if a water leak detection device with an audible alarm is installed inside the pan.

Paragraph 705.10.2 is amended to read as follows:

705.10.2. Solvent cementing. Joint surfaces shall be clean and free from moisture. A purple primer that conforms to ASTM F656 shall be applied. Solvent cement not purple in color and conforming to ASTM D2564, CSA B137.3, CSA B181.2 or CSA B182.1 shall be applied to all joint surfaces. The joint shall be made while the cement is wet and shall be in accordance with ASTM D2855. Solvent-cement joints shall be permitted above or below ground.

Secs. 7-39, 7-40. - Reserved.

ARTICLE VII. - PROPERTY MAINTENANCE

Sec. 7-41. - Code and Appendix Adopted.

Except as amended in this Article, the International Property Maintenance Code, ~~2015~~ 2021 edition, and Appendix A of said code, as published by the International Code Council, are adopted.

Sec. 7-42. - Code Deletions.

The following sections of the International Property Maintenance Code are deleted:

Section 107

Section 108

~~Section 109~~

~~Subsection 109.2~~

~~Subsection 109.3~~

~~Subsection 109.4~~

~~Subsection 109.5~~

~~Section 110~~

Section 111

~~Section 112~~

~~Section 113~~

Sec. 7-43. - Code Amendments.

The following sections of the International Property Maintenance Code are amended as follows:

Subsection 101.1 is amended to read as follows:

101.1 Title. These regulations shall be known as the Property Maintenance Code of the City of Sugar Land, hereinafter referred to as "this code".

Subsection 103.1 is amended to read as follows:

~~*103.1 General.* The city manager will designate which department will serve as the department of property maintenance inspection for the purposes of this code and hereby designates the executive official in charge of the department as the code official.~~

~~*103.1. Enforcement Authority.* The official in charge of the implementation, administration, and enforcement of this Code will be known as the code official.~~

~~*Subsection 103.5* is amended to read as follows:~~

~~*103.5 Fees.* The fees for activities and services performed by the department in carrying out its responsibilities under this code shall be indicated in the City of Sugar Land Code~~

~~of Ordinances.~~

Subsection 105.5 is amended to read as follows:

105.5 Notices and orders. The code official may issue all necessary notices or orders to ensure compliance with this code.

~~Subsection 106.2 is amended to read as follows:~~

~~106.2. Notice of violation.~~ The code official shall serve a notice of violation.

~~Subsection 106.3 is amended to read as follows:~~

~~106.3. Prosecution of violation.~~ Any person failing to comply with a notice of violation or order shall be deemed guilty of a misdemeanor or civil infraction as determined by the city, and the violation shall be deemed a strict liability offense. If the notice of violation is not complied with, the code official shall 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 structure in violation of the provisions of this code or of the order or direction made pursuant thereto. Any action taken by the city on such premises shall be charged against the real estate upon which the structure is located and shall be a lien upon such real estate.

Section 202 definition of Inoperable motor vehicle is amended to read as follows:

Junked motor vehicle. A motor vehicle that is self-propelled and displays an expired license plate or does not display a license plate; and is wrecked, dismantled or partially dismantled, or discarded or is inoperable and has remained inoperable for more than seventy-two consecutive hours, if the vehicle is on public property or for thirty consecutive days, if the vehicle is on private property. A junked motor vehicle may also be an aircraft that does not have lawfully printed on the aircraft an unexpired federal aircraft identification number registered under Federal Aviation Administration aircraft registration regulations in 14 C.F.R. Part 47. A junked motor vehicle may also be a watercraft that does not have lawfully on board an unexpired certificate number and is not a watercraft described by V.T.C.A. § 31.055, Parks and Wildlife Code.

Subsection 302.4 is amended to read as follows:

Subsection 302.4. Weeds. Premises and exterior property shall be maintained free from weed or plant growth in excess of 9 inches except as provided for in other regulations. Noxious weeds shall be prohibited. Weeds shall be defined as all grasses, annual plants and vegetation, other than trees or shrubs provided; however, this term shall not include cultivated flowers and garden. ~~Upon failure of the owner or agent having charge of a property to cut and destroy weeds after service of notice of violation, they shall be subject to prosecution in accordance with Section 106.3 and as prescribed by the authority having jurisdiction. Upon failure to comply with the notice of violation, any duly authorized employee of the jurisdiction or contractor hired by the jurisdiction shall be authorized to enter upon the property in violation and cut and destroy the weeds growing thereon, and the costs of such removal shall be paid by the owner or agent responsible for the property.~~

Subsection 302.8 is amended to read as follows:

302.8 Junked motor vehicle. Except as provided for in other regulations, no junked motor vehicle shall be parked, kept, or stored on any premises. Painting of vehicles is prohibited unless conducted inside an approved spray booth.

Exception: A vehicle of any type is permitted to undergo major overhaul, including body work, provided that such work is performed inside a structure or similarly enclosed area designed and approved for such purposes. The activity must be compliant with zoning regulations.

Subsection 304.14 is amended to read as follows:

304.14. Insect screens. During the period from January 1st to December 31st, every door, window and other outside opening required for ventilation of habitable rooms shall be supplied with approved tightly fitting screens of minimum 16 mesh per inch (16 mesh per 25 mm), and every screen door used for insect control shall have a self-closing device in good working condition.

Subsection 602.3 is amended to read as follows:

602.3 Heat Supply. Every owner and operator of a building who rents, leases or lets one or more dwelling units or sleeping units on terms, either expressed or implied, to furnish heat to the occupants thereof shall supply heat during the period from November to March to maintain a minimum temperature of 68°F (20°C) in all habitable rooms, bathrooms, and toilet rooms.

Subsection 602.4 is amended to read as follows:

602.4 Occupiable work spaces. Indoor occupiable work spaces shall be supplied with heat during the period from November to March to maintain a minimum temperature of 65°F (18°C) during the period the spaces are occupied.

Paragraph ~~704.2.1~~ 704.6.1 is amended to read as follows:

~~704.2.1~~ 704.6.1 Where Required. Existing Group I-1 and R occupancies shall be provided with single-station smoke alarms in accordance with Sections ~~704.2.1.1~~ 704.6.1.1 through ~~704.2.1.4~~ 704.6.1.4. Interconnection and power sources shall be in accordance with Sections ~~704.2.2~~ 704.6.2 and ~~704.2.3~~ 704.6.3.

Exception: Where smoke detectors connected to a fire alarm system have been installed as a substitute for smoke alarms.

Appendix A is amended to read as follows:

A101.1 General. Windows and doors shall be boarded in an approved manner to prevent entry by unauthorized persons and shall be painted with exterior grade paint to correspond to the color of the existing structure.

A101.2 Maintenance. Boarding materials shall be maintained in good condition. Any peeling, flaking and/or chipped paint shall be eliminated and the surfaces repainted.

A103.1 Boarding installation. The boarding installation shall be in accordance with Figures A103.1(1) and A103.1(2) and sections A103.2 through A103.5.

Exception: Alternative methods of installation may be used upon prior approval from the City of Sugar Land.

Secs. 7-44, 7-45. - Reserved.

ARTICLE VIII. - RESIDENTIAL BUILDING CODE

Sec. 7-46. - Code Adopted.

Except as amended in this Article, the International Residential Code, ~~2015~~ 2021 edition, as published by the International Code Council, is adopted.

Sec. 7-47. - Code Deletions.

The following sections of the International Residential Code are deleted.

Section R112

Subsection R113.2

Subsection R113.3

Section R313

Subsection R905.7

Subsection R905.8

Section P2904

Sec. 7-48. - Code Amendments.

The following parts of the International Residential Code are amended:

Subsection R101.1 is amended to read as follows:

R101.1. Title. These regulations shall be known as the Residential Code for One and Two Family Dwellings of the City of Sugar Land, and shall be cited as such and will be referred to hereinafter as "this code."

Subsection R103.1 is amended to read as follows:

R103.1 Enforcement authority. The official in charge of the implementation, administration, and enforcement of this code will be known as the building official.

Subsection R104.3 is amended to read as follows:

R104.3 Notices and orders. The building official may issue necessary notices or orders to ensure compliance with this code.

Subsection R105.2 is amended to read as follows:

R105.2 Work exempt from permit. Exemptions from permit requirements of this code shall not be deemed to grant authorization for any work to be done in any manner in violation of the provisions of this code or any other laws or ordinances of the city. Permits shall not be required for the following:

Building:

1. Painting, papering, tiling, carpeting, cabinets, counter tops and similar finish work.
2. Prefabricated swimming pools that are less than 24 inches (610 mm) deep.
3. Swings and other playground equipment.
4. Decks not exceeding 200 square feet (18.58 m²) in area, that are not more than 30 inches (762 mm) above grade at any point, are not attached to a dwelling do not serve the exit door required by Section R311.4.

5. Solar pergolas.

Electrical:

1. Listed cord-and-plug connected temporary decorative lighting.
2. Reinstallation of attachment plug receptacles but not the outlets therefor.
3. Replacement of branch circuit overcurrent devices of the required capacity in the same location.
4. Electrical wiring, devices, appliances, apparatus or equipment operating at less than 25 volts and not capable of supplying more than 50 watts of energy.
5. Minor repair work, including the replacement of lamps or the connection of approved portable electrical equipment to approved permanently installed receptacles.

Gas:

1. Portable heating, cooking or clothes drying appliances.
2. Replacement of any minor part that does not alter approval of equipment or make such equipment unsafe.
3. Portable-fuel-cell appliances that are not connected to a fixed piping system and are not interconnected to a power grid.

Mechanical:

1. Portable heating appliances.
2. Portable ventilation appliances.
3. Portable cooling units.
4. Steam, hot- or chilled-water piping within any heating or cooling equipment regulated by this code.
5. Replacement of any minor part that does not alter approval of equipment or make such equipment unsafe.
6. Portable evaporative coolers.
7. Self-contained refrigeration systems containing 10 pounds (4.54 kg) or less of refrigerant or that are actuated by motors of 1 horsepower (746 W) or less.
8. Portable-fuel-cell appliances that are not connected to a fixed piping system and are not interconnected to a power grid.

Plumbing:

1. The stopping of leaks in drains, water, soil, waste or vent pipe; provided, however, that if any concealed trap, drainpipe, 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 code.
2. 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.

Section 105 is amended by adding Subsection 105.10 to read as follows:

105.10. Insurance Required. As a condition to the issuance of the permit, the contractor shall certify that the contractor has: Workers' Compensation insurance as required by law; general liability insurance of at least \$100,000.00 for any one accident for property damage and \$300,000.00 for any one person for injuries or death; and \$5,000.00 for medical expenses for any one person.

Subsection R302.2 is amended to read as follows:

R302.2. Townhouses. Common walls separating townhouses shall be assigned a fire-resistance rating in accordance with Section R302.2. The common wall shared by two townhouses shall be constructed without plumbing or mechanical equipment, ducts or vents in the cavity of the common wall. The wall shall be rated for fire exposure from both sides and shall extend on and be tight against exterior walls and the underside of the roof sheathing. Electrical installations shall be in accordance with Chapters 34 through 43. Penetrations of the membrane of common walls for electrical outlet boxes shall be in accordance with Section R302.4.

Exception: Where a fire sprinkler system in accordance with NFPA 13D is required, the common wall shall not be less than 2-hour fire resistance rated wall assembly tested in accordance with ASM or UL.

Section E3803 is amended by amending Table E3803.1 to read as follows:

TABLE E3803.1 (Table 300.5)
MINIMUM COVER REQUIREMENTS, BURIAL IN INCHES ^{a, b, c, d, e,}

<u>LOCATION OF WIRING METHOD OR CIRCUIT</u>	<u>TYPE OF WIRING METHOD OR CIRCUIT</u>				
	<u>1</u> <u>Direct Burial Cables or Conductors</u>	<u>2</u> <u>Rigid Metal Conduit or Intermediate Metal Conduit</u>	<u>3</u> <u>Nonmetallic Raceways Listed for Direct Burial Without Concrete Encasement or Other Approved Raceways</u>	<u>4</u> <u>Residential Branch Circuits Rated 120 Volts or Less With GFCI protection and Maximum Overcurrent Protection of 20 Amperes</u>	<u>5</u> <u>Circuits for Control of Irrigation and Landscape Lighting Limited to Not More Than 30 Volts and Installed with Type UF or in Other Identified Cable or Raceway</u>
<u>All locations not specified below</u>	<u>24^h</u>	<u>6</u>	<u>18</u>	<u>12</u>	<u>6^{f, g}</u>
<u>In trench below 2-inch-thick concrete or equivalent</u>	<u>18^h</u>	<u>6</u>	<u>12</u>	<u>6</u>	<u>6</u>
<u>Under a building</u>	<u>0</u> <u>(In raceway only or Type MC identified for direct burial)</u>	<u>0</u>	<u>0</u>	<u>0</u> <u>(In raceway only or Type MC identified for direct burial)</u>	<u>0</u> <u>(In raceway only or Type MC identified for direct burial)</u>
<u>Under minimum of 4-inch-thick concrete exterior slab with no vehicular traffic and the slab extending not less than 6 inches beyond the underground installation</u>	<u>18^h</u>	<u>4</u>	<u>4</u>	<u>6 (Direct burial)</u> <u>4 (In raceway)</u>	<u>6 (Direct burial)</u> <u>4 (In raceway)</u>
<u>Under streets, highways, roads, alleys, driveways and parking lots</u>	<u>24^h</u>	<u>24</u>	<u>24</u>	<u>24</u>	<u>24</u>
<u>One- and two-family dwelling driveways and outdoor parking areas, and used only for dwelling-related purposes</u>	<u>18^h</u>	<u>18</u>	<u>18</u>	<u>12</u>	<u>18</u>
<u>In solid rock where covered by minimum of 2 inches concrete extending down to rock</u>	<u>2 (In raceway only)</u>	<u>2</u>	<u>2</u>	<u>2 (In raceway only)</u>	<u>2 (In raceway only)</u>

For SI: 1 inch = 25.4 mm.

- a. Raceways approved for burial only where encased concrete shall require concrete envelope not less than 2 inches thick.
- b. Lesser depths shall be permitted where cables and conductors rise for terminations or splices or where access is otherwise required.

- c. Where one of the wiring method types listed in columns 1 to 3 is combined with one of the circuit types in columns 4 and 5, the shallower depth of burial shall be permitted.
- d. Where solid rock prevents compliance with the cover depths specified in this table, the wiring shall be installed in metal or nonmetallic raceway permitted for direct burial. The raceways shall be covered by a minimum of 2 inches of concrete extending down to the rock.
- e. Cover is defined as the shortest distance in inches (millimeters) measured between a point on the top surface of any direct-buried conductor, cable, conduit or other raceway and the top surface of finished grade, concrete, or similar cover.
- f. A lesser depth shall be permitted where specified in the installation instructions of a listed low-voltage lighting system.
- g. A depth of 6 inches shall be permitted for pool, spa, and fountain lighting that is installed in a nonmetallic raceway, limited to not more than 30 volts and part of a listed low-voltage lighting system.
- h. Direct buried cables and conductors shall be installed in an approved conduit or raceway.

Paragraph R315.2.2 is amended to read as follows:

R315.2.2 Alterations, repairs and additions. Where alterations, repairs or additions requiring a permit occur, 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 systems that are not fuel fired.
3. Installation, alteration or repairs of mechanical systems that are not fuel fired.

Subsection G2417.4 is amended to read as follows:

G2417.4(406.4) Test pressure measurement. Test pressure shall be measured with a manometer or with a pressure-measuring device designed and calibrated to read, record, or indicate a pressure loss caused by leakage during the pressure test period. Spring type test gauges are not permitted. The source of pressure shall be isolated before the pressure tests are made. Mechanical gauges used to measure test pressures shall have a range such that the highest end of the scale is not greater than five times the test pressure.

Paragraph P2801.6.1 is amended to read as follows:

P2801.6.1 Pan size and drain. The pan shall be not less than 1 1/2 inches (38 mm) deep and shall be of sufficient size and shape to receive dripping or condensate from the tank or water heater. The pan shall be drained by an indirect waste pipe of not less than 3/4-inch (19 mm) diameter. Piping for safety pan drains shall be of those materials indicated in Table P2906.5.

Where a pan drain was not previously installed, a pan drain shall not be required for a replacement water heater installation if a water leak detection device with an audible alarm is installed inside the pan.

Secs. 7-49, 7-50. - Reserved.

ARTICLE VIII-A. - SWIMMING POOL AND SPA CODE

Sec. 7-51. - Code Adopted.

Except as amended in this Article, the International Swimming Pool and Spa Code, 2015-2021 edition, as published by the International Code Council, is adopted.

Sec. 7-52. - Code Amendments.

The following sections of the International Swimming Pool and Spa Code ~~is~~ are amended as follows:

Subsection 101.1 is amended to read as follows:

101.1. Title. These regulations shall be known as the Swimming Pool and Spa Code of the City of Sugar Land, hereinafter referred to as "this code."

Subsection 103.1 is amended to read as follows:

103.1. Enforcement Authority. The official in charge of the implementation, administration, and enforcement of this Code will be known as the code official.

Paragraph 113.6.1 is amended to read as follows:

113.4.1. Authority to condemn a system. Where the code official determines that any system, or portion thereof, regulated by this code has become hazardous to life, health or property or has become insanitary, the code official may order in writing that such system either be removed or restored to a safe or sanitary condition. A time limit for compliance with such order may be specified in the written notice. A person shall not use or maintain a defective system after receiving such notice. In cases of immediate danger to life or property, such disconnection shall be made immediately without such notice.

Paragraph 113.6.3 is amended to read as follows:

113.6.3. Connection after order to disconnect. A person shall not make connections from any energy, fuel, power supply or water distribution system, or supply energy, fuel or water to any equipment regulated by this code that has 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 equipment. When any system is maintained in violation of this code, the code official may institute any appropriate action to prevent, restrain, correct or abate the violation.

Sec. 7-53. - Code Deletions.

The following sections of the International Swimming Pool and Spa Code ~~is~~ are deleted:

~~Section 108~~

~~Section 111~~

~~Section 112~~

~~Subsection 113.2~~

Subsection 113.3

Subsection 113.4

Subsection 113.5

Secs. 7-54, 7-55. - Reserved.

ARTICLE IX. – FIRE PREVENTION

Sec. 7-56. - Reserved.

Sec. 7-57. - Code Adopted.

Except as amended in this Article, the International Fire Code, ~~2015~~ 2021 edition, as published by the International Code Council, is adopted.

Sec. 7-57.1. - Appendix Adopted.

Except as amended in this Article, Appendix B, C, and D of the International Fire Code, ~~2015~~ 2021 edition, are adopted.

Sec. 7-57.2. - ~~Code Deletions~~ Reserved.

~~The following sections of the International Fire Code are deleted:-~~

~~Subsections 103.2—103.4~~

~~Subsection 510.2~~

Sec. 7-58. - Code Amendments.

The following sections of the International Fire Code are amended:

Subsection 101.1 is amended to read as follows:

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

Subsection 103.1 is amended to read as follows:

103.1. General. The department of fire prevention is established within the city under the direction of the fire marshal, hereafter referred to in this code as the fire code official. The function of the department shall be the implementation, administration and enforcement of the provisions of this code.

Subparagraph 105.5.53 is added to read as follows:

105.5.53. Places of Custodial Care. An operational permit is required for Group R-3 and R-4 Occupancies that provide custodial care. Occupancies include care facilities, congregate care, congregate living facilities, alcohol and drug centers, assisted living facilities, group homes and halfway houses.

Paragraph 105.6.25 is added to read as follows:

105.6.25. Electronic Access Control Device. A construction permit is required for the installation of or modification to electronic access control device or related equipment. Maintenance performed in accordance with this code is not considered to be a modification and does not require a construction permit.

~~*Paragraph 105.7.6* is amended to read as follows:~~

~~*105.7.6. Fire alarm and detection systems and related equipment.* A construction permit is required for installation of or modification to fire alarm, detection systems and electronic door locking systems and related equipment. Maintenance performed in accordance with~~

~~this code is not considered a modification and does not require a permit.~~

Subsection 106.4 is amended to read as follows:

106.4. Retention of construction documents. One set of construction documents shall be retained by the fire code official for a period of not less than 180 days from the date of completion of the permitted work, or as required by state or local laws. One hard paper copy of approved construction documents shall be returned to the applicant. The size of the documents will be relative to the scope and size of the work. The hard copy must remain present at the construction throughout the duration of the authorized work, to allow for verification and inspection by the fire code official.

Subsection ~~409.4~~ 112.4 is amended to read as follows:

~~409.4~~ 112.4. Violation penalties. Persons who knowingly violate a provision of this code or fail to comply with any of the requirements thereof or who erect, install, alter, repair or do work in violation of the approved construction documents or directive of the fire code official, or of a permit or certificate used under the provisions of this code, shall be guilty of a misdemeanor and will be punished as authorized in section ~~4-7~~ 1-9 of the Development Code, as amended therein and thereafter.

Section 202 is amended by adding a definition for “electronic access control device” to read as follows:

ELECTRONIC ACCESS CONTROL DEVICE. An electronic or computer-based device, including a telephone entry system, that allows access or controls egress in any occupancy classification.

Paragraph 307.6 is added to read as follows:

307.6. Rubbish burning. The burning of rubbish shall be prohibited. For the purposes of this section, rubbish includes plastic, rubber, and other materials defined as rubbish in section 202 of this code.

Subsection 307.2 is amended to read as follows:

307.2. Permit required. A permit must be obtained from the fire code official in accordance with Section ~~405-6~~ 105.5 prior to kindling a fire for recognized silvicultural or range wildlife management practices, prevention or control of disease or pests, bonfire, recreational fire or controlled burning as allowed by the Texas Commission on Environmental Quality.

Subparagraph 308.1.6.3 is amended to read as follows:

308.1.6.3 Sky lanterns. Sky lanterns are prohibited.

Paragraph ~~503.1.1~~ is 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 one hundred fifty (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. One (1) side of all buildings shall be within fifty (50) feet of the fire lane. Access roadways shall extend the entire length of one (1) side of all buildings thirty (30) feet in height, and shall not be less than fifteen (15) feet or more than thirty (30) feet from the building to accommodate ladder~~

~~operations. The area from the building to the access roadway shall be free of any obstructions that might interfere with ladder operations.~~

The Exceptions to *Paragraph 503.1.1* is amended by adding Subparagraphs (1.4) and (1.5) to read as follows:

(1.4) Group U and other accessory use buildings, five hundred (500) square feet or less, may be located more than fifty (50) feet but not more than five hundred (500) feet from an access roadway, provided the code official determines that the conditions are such that firefighting operations will not be obstructed.

(1.5) The width of access roadways accessing one- and two-family dwellings, which are located more than one hundred fifty (150) feet but less than five hundred (500) feet from a public street, shall not be less than twelve (12) feet wide.

Subsection 503.3 is amended to read as follows:

503.3. Marking. Where required by the fire code official, approved signs or other approved notices shall be provided for fire apparatus access road to identify such roads or prohibit the obstruction thereof. Signs or notices shall be maintained in a clean and legible condition at all times and be replaced or repaired when necessary to provide adequate visibility. Fire lane markings shall be in accordance with Appendix D of this chapter. It is unlawful for any person to occupy, continue to occupy, or make use of any building until the requirements for fire lane markings applicable to the real property where the building is located have been met.

Subsection 503.4 is amended to read as follows:

503.4. Obstruction of fire apparatus access roads. Fire apparatus access roads shall not be obstructed in any manner. The minimum widths and clearances established in Paragraphs 503.2.1 and 503.2.2 shall be maintained at all times. For any unattended motor vehicle that is stopped or parked in a fire apparatus access road, it is presumed that the registered owner of the vehicle is the person who stopped or parked the vehicle at the time and place the offense occurred.

~~*Paragraph 503.4.1* is amended to read as follows:~~

~~*503.4.1 Traffic calming devices.* Speed humps and speed bumps are prohibited.~~

Paragraph 603.5.2 is amended by deleting the enumerated exceptions, to read as follows:

603.5.2. Application and use. Relocatable power taps and current taps shall be directly connected to a permanently installed receptacle.

~~*Subsection 605.4* is amended by adding Paragraph 605.4.4 to read as follows:~~

~~*605.4.4. Fused plug strips.* Multi-plug power strips equipped with over-current protection may be used if listed by a nationally recognized testing organization. The amperage of the device shall not be less than the rated capacity of the appliance, fixture or outlet served.~~

Subsection 903.2 is amended to read as follows:

903.2. Where required. Approved automatic fire sprinkler systems shall be provided in new buildings and structures and in existing buildings and structures ~~shall be provided~~ in the locations listed below and where otherwise described in this code.

1. All new buildings where the fire area exceeds five thousand (5,000) square feet. For the purposes of this provision, a fire wall does not delineate a separate building.
 2. In existing buildings, if any addition results in a gross fire area of more than five thousand (5,000) square feet or raises the building height beyond two stories. For the purposes of this provision, the addition of a fire wall does not delineate a separate building.
 3. In existing buildings where the fire area exceeds five thousand (5,000) square feet, when thirty (30) percent or more of the building undergoes renovation in one or more phases.
-
- ~~1. All new non-residential buildings with a total square footage of seven thousand five hundred (7,500) feet or more. To be considered a separate building, attached buildings must be separated by a UL-listed four-hour fire-rated wall, without openings, and must be supplied with separate utility connections.~~
 - ~~2. All new residential buildings classified by the International Building Code as Group R-1, R-2 or R-4. This includes motels, hotels, condominiums, town-homes, apartment buildings, dormitories, boarding houses, convents, fraternities, sororities and monasteries.~~
 - ~~3. Any new building not accessible by an approved access roadway.~~
 - ~~4. Existing non-residential buildings when any addition creates a building space totaling seven thousand five hundred (7,500) square feet or more.~~
 - ~~5. Existing non-residential buildings when the combining of one (1) or more lease spaces results in a lease space totaling twelve thousand (12,000) square feet or more.~~
 - ~~6. Existing non-residential buildings fifteen thousand (15,000) square feet or more, when more than fifty (50) percent of the building is renovated in one or more phases.~~

~~Exceptions: Automatic fire sprinklers are not required in the following open structures:~~

~~Pavilions, open gazebos, detached canopies or open parking garages as defined by the Building Code. Except for parking garages, open structures shall have a minimum of seventy (70) percent clear opening on all sides. Parking garages shall be considered open structures when they meet the criteria for open parking garages as defined by the Building Code.~~

Subparagraphs 903.2.1.1 through 903.2.1.4 are amended to read as follows:

903.2.1.1. Group A-1. An automatic sprinkler system shall be provided throughout stories containing Group A-1 occupancies and throughout all stories from the Group A-1 occupancy to and including the levels of exit discharge serving that occupancy where one of the following conditions exists:

1. The fire area exceeds 5,000 square feet (464.5 m²) or the building is greater than one story in height.
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. The fire area contains a multiple-theater complex.

903.2.1.2. Group A-2. An automatic sprinkler system shall be provided throughout stories containing Group A-2 occupancies and throughout all stories from the Group A-2 occupancy to and including the levels of exit discharge serving that occupancy where one of the following conditions exists:

1. The fire area exceeds 5,000 square feet (464.5 m²) or the building is greater than one

- story in height.
2. The fire area has an occupant load of 100 or more.
 3. The fire area is located on a floor other than a level of exit discharge serving such occupancies.

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 5,000 square feet (464.5 m²) or the building is greater than two stories in height.
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.

903.2.1.4. Group A-4. An automatic sprinkler system shall be provided throughout stories containing Group A-4 occupancies and throughout all stories from the Group A-4 occupancy to and including the levels of exit discharge serving that occupancy where one of the following conditions exists:

1. The fire area exceeds 5,000 square feet (464.5 m²) or the building is greater than two stories in height.
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.

Paragraph 903.2.4 is amended to read as follows:

903.2.4. Group F-1. An automatic sprinkler system shall be provided throughout all buildings containing a Group F-1 occupancy where the fire area exceeds 5,000 square feet (464.5 m²).

Paragraph 903.2.7 is amended to read as follows:

903.2.7. Group M. An automatic sprinkler system shall be provided throughout buildings containing a Group M occupancy where the Group M fire area exceeds 5,000 square feet (464.5 m²).

Paragraph 903.2.9 is amended to read as follows:

903.2.9. Group S-1. An automatic sprinkler system shall be provided throughout all buildings containing a Group S-1 occupancy where the fire area exceeds 5,000 square feet (464.5 m²).

Subparagraph 903.2.9.1 is amended to read as follows:

903.2.9.1. Repair garages. An automatic sprinkler system shall be provided throughout all buildings used as repair garages where the fire area exceeds 5,000 square feet (464.5 m²), in accordance with Section 406.8 of the Building Code.

Paragraph 903.2.10 is amended to read as follows:

903.2.10. Group S-2 enclosed parking garages. An automatic sprinkler system shall be provided throughout buildings classified as enclosed parking garages in accordance with Section 406.6 of the Building Code whether either of the following conditions exist:

1. Where the fire area of the enclosed parking garage, subject to Section 406.6 of the Building Code, exceeds 5,000 square feet (464.5 m²).
2. Where the enclosed parking garage is located beneath and/or attached to other occupancy groups.
3. Where the open parking garage, subject to Section 406.5 of the Building Code, exceeds 48,000 square feet (4460m²).

Subparagraph 903.2.11.3 is amended to read as follows:

903.2.11.3 Buildings 35 feet or more in height. An automatic sprinkler system shall be installed throughout buildings that have one or more stories located 35 feet (10668 mm) or more above the lowest level of fire department vehicle access, measured to the finished floor.

Clause 903.3.1.2.3 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.
5. Group R-2 occupancy attics not required by Item 1 to have sprinklers shall comply with one of the following:
 - 5.1. Provide automatic sprinkler system protection.
 - 5.2. Provide a heat detection system throughout the attic that is arranged to activate the building fire alarm system.

~~Subsection 903.4 is amended to read as follows:~~

~~903.4. Sprinkler system monitoring and alarms. All valves controlling the water supply for automatic 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 sprinkler systems serving fewer than twenty (20) sprinklers.~~
- ~~3. Automatic sprinkler systems installed in accordance with 13R where a common supply main is used to supply both domestic water and automatic sprinkler systems 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, pre-action and deluge sprinkler systems that are sealed or locked in the open position.~~
- ~~8. P.I.V. valves located in a secure location under the supervision of the property owner may be locked in the open position.~~

Paragraph 903.4.2 is amended to read as follows:

903.4.2. Alarms. Approved audible devices shall be connected to every automatic sprinkler system. Such sprinkler water flow alarm devices shall be activated by water flow equivalent to the flow of a single sprinkler of the smallest orifice size installed in the system. ~~Alarm devices~~ An electric/water bell shall be provided on the exterior of the building, in an approved location. When water flow supervision is provided, alarm devices shall be located within the interior of the building to provide an internal evacuation signal throughout the building in all common areas and areas accessible to the public. Group R-1, R-2 and condominiums shall be provided with an alarm signal device in each unit to provide an internal evacuation signal separate and distinct from the security system. Where a fire alarm system is installed, actuation of the automatic sprinkler system shall actuate the building fire alarm system.

~~Subsection 905.3 is amended to read as follows:~~

~~905.3. Required installations. Standpipe systems shall be installed where required by Paragraphs 905.3.1 through 905.3.6 and in the locations indicated in Subsections 905.4, 905.5, 905.6 and in open or closed automobile parking garages, as defined by the Building Code. Standpipe systems are allowed to be combined with automatic sprinkler systems. Exception: Standpipe systems are not required in Group R-3 occupancies.~~

Subsection 5608.1 is amended to add Paragraph 5608.1.1 to read as follows:

5608.1.1. *Fireworks*. The possession, manufacture, storage, sale, handling and use of fireworks are prohibited within the city limits of Sugar Land, Texas. It shall be unlawful for any person to manufacture or sell fireworks within the City of Sugar Land corporate limits. Except as herein provided, it shall be unlawful for any person to assemble, possess, store, transport, receive, keep, sell, offer or have in his or her possession with the intent to sell, use, discharge, ignite, detonate, fire or otherwise put in action any fireworks of any description.

Exception: The use of approved fireworks for display as permitted in Section 5608.

Subsection 5608.2 is amended to read as follows:

5608.2. *Permit application.* Prior to issuing permits for fireworks display, plans for the display, inspections of the display site and demonstrations of the display operations shall be approved and all applicable state and federal permits shall have been obtained. The applicant for the display shall, at the time of making application, furnish proof that he or she carries compensation insurance for his employees as provided for by laws of this state and he or she shall file with the code official, for approval, a certificate of insurance evidencing the carrying of public liability insurance, including bodily injury liability, in limits of not less than one hundred thousand dollars (\$100,000.00) for each person and one million dollars (\$1,000,000.00) for each accident, issued by an insurance company authorized to conduct business in this state for the benefit of the person named therein as insured as evidence of ability to respond in damages in at least the above amounts. For each display of fireworks under this section, standby personnel and equipment from the Sugar Land Fire Department shall be required. The number of personnel and equipment to be in attendance shall be determined by the Fire Marshal. The expense of such personnel and equipment at the display shall be paid in advance by the applicant prior to the issuance of the permit. The fee charged for each standby fire engine and crew shall be as specified in the appropriate fee schedule of the City of Sugar Land. Fees for other required personnel shall be based on actual cost.

~~Subclause 5704.2.7.5.5.2 is amended to read as follows:~~

~~5704.2.7.5.5.2. *Underground tanks.* For underground tanks, fill pipe and discharge lines shall enter only through the top. Fill lines shall be sloped toward the tank. Underground tanks for, Class I liquids, having a capacity greater than one thousand (1,000) gallons (3,785 L) shall be equipped with a tight fill device for connecting the fill hose to the tank. Product discharge lines shall be provided with an approved secondary containment system.~~

~~Subparagraph 5704.2.7.7 is amended to read as follows:~~

~~5704.2.7.7 *Design, fabrication, construction and general installation requirements for tanks.* The design, fabrication, construction and general installation 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. Underground tanks shall be of double-wall construction and shall meet the latest federal and state construction and installation rules, regulations and laws.~~

~~Clause 5704.2.9.6.1 is amended to read as follows:~~

~~5704.2.9.6.1. *Locations where above-ground tanks are prohibited.* Storage of Class I and II liquids in above-ground storage tanks outside of buildings is prohibited.~~

~~*Exceptions:*~~

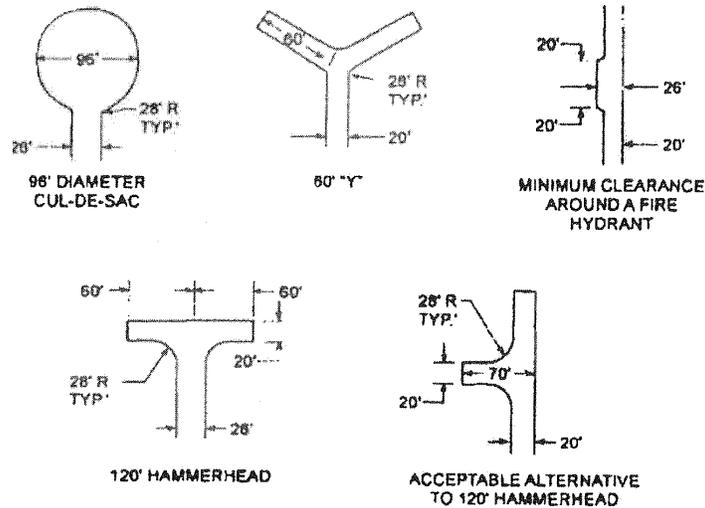
- ~~1. Portable storage tanks for Class I or Class II flammable or combustible liquids, not exceeding six hundred sixty (660) gallons, may be allowed at construction sites if the code official determines that necessary safety precautions and procedures are provided.~~
- ~~2. Portable storage tanks for Class II and Class III combustible liquids, not exceeding one thousand one hundred (1,100) gallons, may be allowed at construction sites if the code official determines that necessary safety precautions and procedures are provided.~~
- ~~3. The storage of flammable and combustible liquids in protected above-ground storage tanks may be allowed at locations other than Group R occupancy locations, if the code official determines that necessary safety precautions and procedures are provided.~~

4. ~~The storage of flammable and combustible liquids in areas zoned as Group M.~~
5. ~~The storage of Class III B combustible liquids, at garages and service stations, in approved storage tanks.~~

Subsections D103.1, D103.5, D103.6, and D107.1 of Appendix D are amended to read as follows:

D103.1 Access road width with a hydrant. Where a fire hydrant is located on a fire apparatus access road, the minimum road width shall be 24 feet, exclusive of shoulders.

Figure D103.1 Dead-End Fire Apparatus Access Road Turnaround



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

1. ~~The minimum gate width shall be 20 feet except, the minimum gate width across single lane one way access points shall be 14 feet.~~
2. ~~Gates shall be of the swinging or sliding type. Construction of gates shall be of materials that allow manual operation by one person.~~
3. ~~Gate components shall be maintained in an operative condition at all times and replaced or repaired when defective.~~
4. ~~Commercial 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.~~
5. ~~Manual opening gates shall not be locked with a padlock or chain and padlock unless they are capable of being opened by means of forcible entry tools or when a key box containing the key(s) to the lock is installed at the gate location.~~
6. ~~Locking device specifications 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 F 2200.~~
9. ~~Residential electric gates providing access to more than four (4) residences shall be equipped with radio frequency controlled emergency access approved by the fire code official.~~
10. ~~Existing residential electric gates not equipped with radio controlled emergency access are required to have radio frequency controlled emergency access by January 2018.~~

D103.6 Signs. Where required by the fire code official, fire apparatus access roads shall be

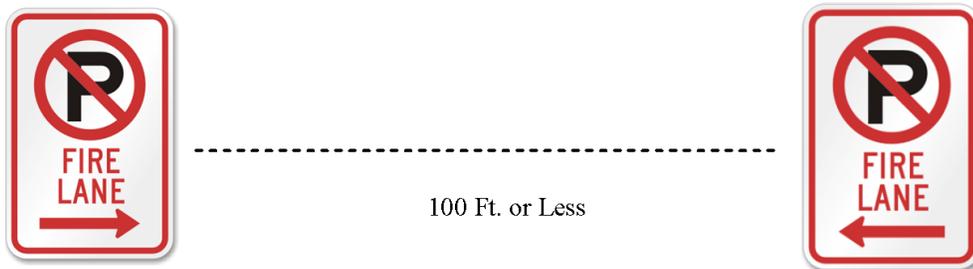
marked in one of the following manners:

1. CURB PAINTING - Curbs along fire lanes shall be painted red with white letters stating "FIRE LANE TOW AWAY ZONE" and/or "FIRE LANE NO PARKING" painted at intervals not exceeding every 50' feet. The letters shall not be less than ~~three~~ four inches tall.
2. FLAT SURFACE (NO CURB) - A red six (6) inch stripe, with markings indicated in Paragraph 1 above, shall be placed along the outer edges of the pavement along the fire lane.
3. Free standing signs placed along the fire lane. The design and placement of signs shall be in accordance with figure D 103.6. Signs shall have a minimum dimension of 12 inches wide by 18 inches high and have red letters on a white reflective background. Signs shall be posted on one or both sides of the fire apparatus road as required by Paragraphs D103.6.1 or D103.6.2.

Figure D103.6
Fire Lane Marking Standard Signage

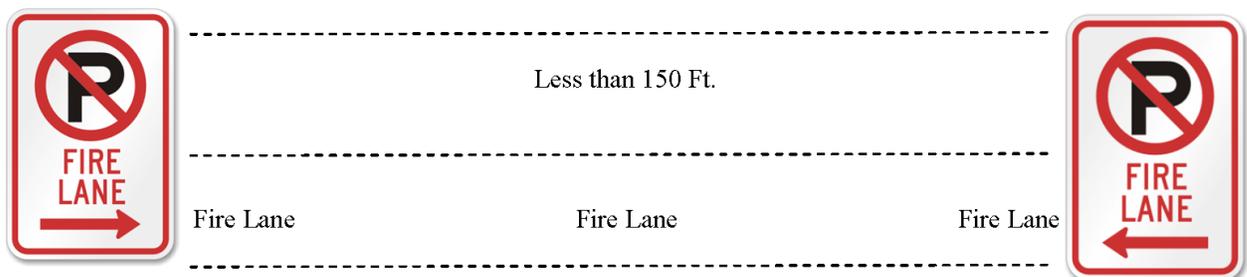
1. One hundred (100) foot separation, or less, between zone extremity.

One sign at each extremity, with single arrow indicator pointing in direction of zone.



2. Between one hundred (100) feet, but less than one hundred fifty (150) feet.

Between zone extremity, one sign at each extremity, with single arrow indicator pointing in direction of zone.



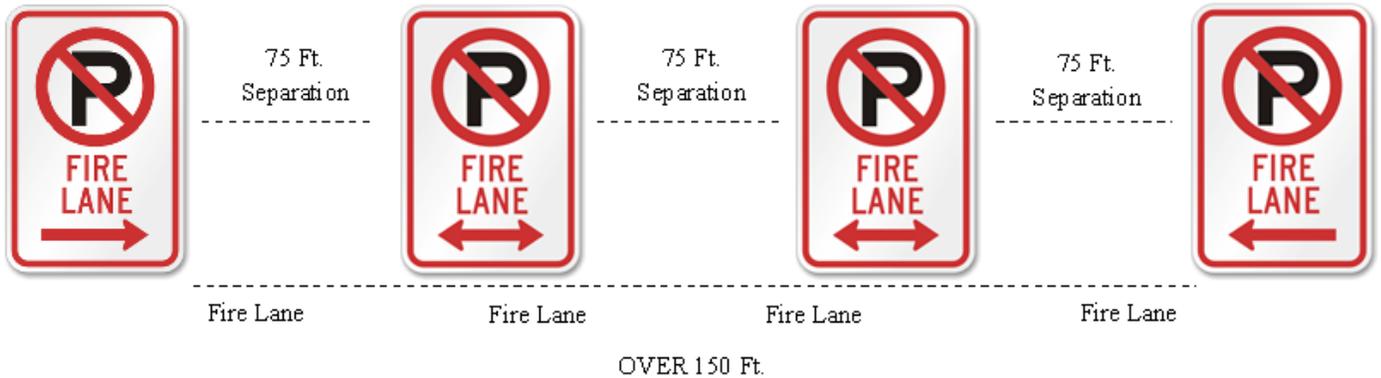
3. One hundred fifty (150) foot separation between zone extremity.

One sign at each extremity, with single arrow indicator pointing in direction of zone, with one additional sign with double arrow indicator pointing in both directions of zone, located at seventy-five (75) foot point within the zone.



4. Over one hundred and fifty (150) feet between zone extremities.

One sign at each extremity with single arrow indicator pointing in the direction of zone, with additional signs, with double arrow indicator pointing in both directions of zone, located at each seventy-five (75) foot interval between extremity signs.



5. Sign placement intervals may exceed the requirement of 1, 2, 3, and 4 above if approved by the Fire Official.

6. Signs



Left Extremity Arrow Indicator



Center Arrow Indicator Pointing in Direction Regulation in Effect



Right Extremity Arrow Indicator

7. Signs

Sign, border, lettering, background

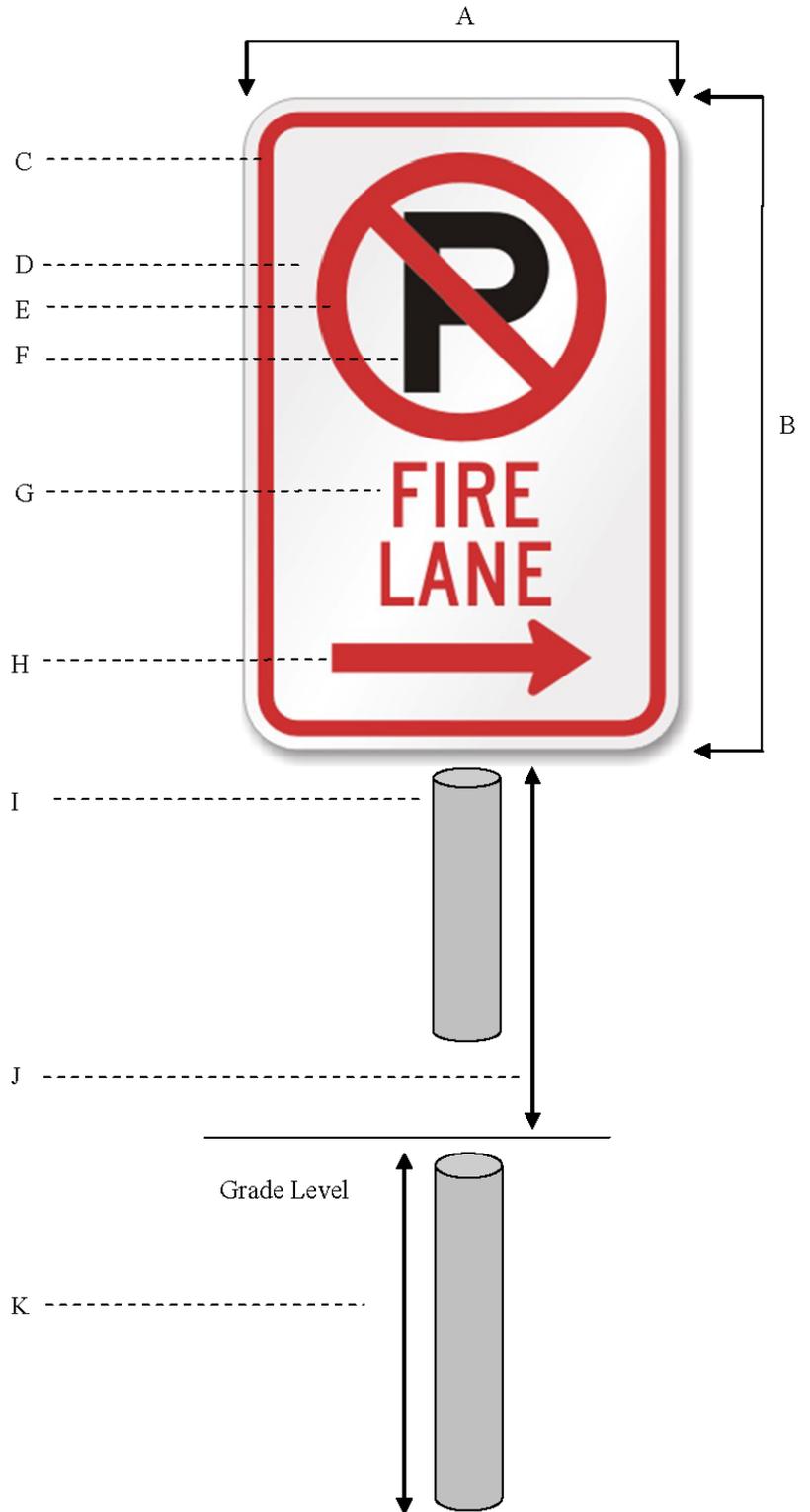
Instruction indicator is required to be reflectorized

Sign material - .080 Aluminum

- A. Sign width – 12”
- B. Sign length – 18”
- C. Outside border – Red
Min. 1/2” wide
- D. Background – White
- E. Circle/Slash – Red
Min. 8” diameter
- F. Letter P – Black
Min. 5” tall, 1” wide
- G. Wording – Red
Min. 1.75” high, 1/16” wide
- H. Arrow Indicators – Solid Red
- I. Sign post – 3/8”
Galvanized Tubular
- J. Sign Height from grade
Level, seven feet (7’)
- K. Sign post set min.
of eighteen inches
(18”) below grade
in well packed or
concrete foundation

Signs shall be securely fastened to post at the upper and lower center positions of sign face

*Drawing is not to scale



D107.1 One- or two-family dwelling residential developments. Developments of one- or two- family dwellings where the number of dwelling units exceeds 75 shall be provided with separate and approved fire apparatus access roads and shall meet the requirements of Section D104.3.

Exceptions:

1. Where there are more than 75 dwelling units on 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 Subparagraphs 903.3.1.1, 903.3.1.2 or 903.3.1.3 of the International Fire Code, access from two directions shall not be required.
2. The number of dwelling units on 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.

Secs. 7-59—7-59.4. - Reserved.

ARTICLE IX-A. - ENERGY

Sec. 7-59.5. - Code Adopted.

Except as amended in this Article, the International Energy Conservation Code, ~~2015~~ 2021 edition, as published by the International Code Council, is adopted.

Sec. 7-59.6. - Code Deletions.

The following sections of the International Energy Conservation Code are deleted:

- Section ~~C109~~ C110
- Section ~~R109~~ R110
- Section R404.2
- Section R404.3

Sec. 7-59.7. - Code Amendments.

The following sections of the International Energy Conservation Code ~~is~~ are amended as follows:

Subsection 101.1 is amended to read as follows:

101.1. Title. These regulations shall be known as the International Energy Conservation Code of the City of Sugar Land, hereinafter referred to as "this code."

Paragraph C102.1.2 is added to read as follows:

C102.1.2 Alternative compliance. A building certified by a national, state, or local accredited energy efficiency program and determined by the Energy Systems Laboratory to be in compliance with the energy efficiency requirements of this section may, at the option of the code official, be considered in compliance. The United States Environmental Protection Agency's Energy Star Program certification of energy code equivalency shall be considered in compliance.

Paragraph R102.1.2 is added to read as follows:

R102.1.2 Alternative compliance. A building certified by a national, state, or local accredited energy efficiency program and determined by the Energy Systems Laboratory to be in compliance with the energy efficiency requirements of this section may, at the option of the code official, be considered in compliance. The United States Environmental Protection Agency's Energy Star Program certification of energy code equivalency shall be considered in compliance. Regardless of the program or the path to compliance, each 1- and 2-family dwelling shall be tested for air and duct leakage as prescribed in Section R402.4.1.2 and R403.3.3 respectively.

Subsection R405.2 is amended by amending Table R405.2 to read as follows:

**TABLE R405.2
REQUIREMENTS FOR TOTAL BUILDING PERFORMANCE**

<u>SECTION^a</u>	<u>TITLE</u>
<u>General</u>	
<u>R401.2.5</u>	<u>Additional energy efficiency</u>
<u>R401.3</u>	<u>Certificate</u>

<u>Building Thermal Envelope</u>	
R402.1.1	Vapor retarder
R402.2.3	Eave baffle
R402.2.4.1	Access hatches and doors
R402.2.10.1	Crawl space wall insulation installations
R402.4.1.1	Installation
R402.4.1.2	Testing
R402.5	Maximum fenestration U-factor and SHGC
<u>Mechanical</u>	
R403.1	Controls
R403.3, including R403.3.1, except Sections R403.3.2, R403.3.3 and R403.3.6	Ducts
R403.4	Mechanical system piping insulation
R403.5.1	Heated water circulation and temperature maintenance systems
R403.5.3	Drain water heat recovery units
R403.6	Mechanical ventilation
R403.7	Equipment sizing and efficiency rating
R403.8	Systems serving multiple dwelling units
R403.9	Snow melt and ice systems
R403.10	Energy consumption of pools and spas
R403.11	Portable spas
R403.12	Residential pools and permanent residential spas
<u>Electrical Power and Lighting Systems</u>	
R404.1	Lighting equipment

a. [Reference to a code section includes all the relative subsections except as indicated in the table.](#)

Subsection 406.2 is amended by amending Table R406.2 to read as follows:

**TABLE R406.2
REQUIREMENTS FOR ENERGY RATING INDEX**

<u>SECTION^a</u>	<u>TITLE</u>
<u>General</u>	
R401.2.5	Additional efficiency packages
R401.3	Certificate
<u>Building Thermal Envelope</u>	
R402.1.1	Vapor retarder
R402.2.3	Eave baffle
R402.2.4.1	Access hatches and doors
R402.2.10.1	Crawl space wall insulation installation
R402.4.1.1	Installation
R402.4.1.2	Testing

<u>Mechanical</u>	
<u>R403.1</u>	<u>Controls</u>
<u>R403.3 except Sections R403.3.2, R403.3.3 and R403.3.6</u>	<u>Ducts</u>
<u>R403.4</u>	<u>Mechanical system piping insulation</u>
<u>R403.5.1</u>	<u>Heated water calculation and temperature maintenance systems</u>
<u>R403.5.3</u>	<u>Drain water heat recovery units</u>
<u>R403.6</u>	<u>Mechanical ventilation</u>
<u>R403.7</u>	<u>Equipment sizing and efficiency rating</u>
<u>R403.8</u>	<u>Systems serving multiple dwelling units</u>
<u>R403.9</u>	<u>Snow melt and ice systems</u>
<u>R403.10</u>	<u>Energy consumption of pools and spas</u>
<u>R403.11</u>	<u>Portable spas</u>
<u>R403.12</u>	<u>Residential pools and permanent residential spas</u>
<u>Electrical Power and Lighting Systems</u>	
<u>R404.1</u>	<u>Lighting equipment</u>
<u>R406.3</u>	<u>Building thermal envelope</u>

- a. Reference to a code section includes all of the relative subsections except as indicated in the table.

Paragraph R402.4.6 is amended to read 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