

ORDINANCE NO. _____

An ordinance amending Chapter 60, “Dallas Fuel Gas Code,” of the Dallas City Code, as amended; adopting with certain changes the 2021 Edition of the International Fuel Gas Code of the International Code Council, Inc.; regulating the construction, enlargement, alteration, repair, use, and maintenance of fuel gas work in the city; providing a penalty not to exceed \$2,000; providing a saving clause; providing a severability clause; and providing an effective date.

BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF DALLAS:

SECTION 1. That Chapter 60, “Dallas Fuel Gas Code,” of the Dallas City Code, as amended, is amended by adopting the 2021 Edition of the International Fuel Gas Code of the International Code Council, Inc. (which is attached as Exhibit A and made a part of this ordinance), with the following amendments:

1. Chapter 1, “Scope and Administration,” of the 2021 International Fuel Gas Code is deleted and replaced with a new Chapter 1, “Administration,” to read as follows:

**“CHAPTER 1
ADMINISTRATION**

**SECTION 101
GENERAL**

101.1 Title. These regulations are known as the *Dallas Fuel Gas Code*, hereinafter referred to as “this code.”

101.2 Scope. This code applies to the installation of fuel-gas *piping* systems, fuel gas appliances, gaseous hydrogen systems and related accessories.

101.2.1 Piping systems. These regulations cover *piping* systems for natural gas with an operating pressure of 125 pounds per square inch gauge (psig) (862 kPa gauge) or less, and for

LP-gas with an operating pressure of 20 psig (140 kPa gauge) or less, except as provided in Section 402.6. Coverage must extend from the *point of delivery* to the outlet of the *appliance* shutoff valves. *Piping* system requirements must include design, materials, components, fabrication, assembly, installation, testing, inspection, operation and maintenance.

101.2.2 Gas appliances. Requirements for gas appliances and related accessories must include installation, combustion and ventilation air and venting and connections to *piping* systems.

101.2.3 Exclusions. This code does not apply to the following:

1. Portable LP-gas appliances and *equipment* of all types that is not connected to a fixed fuel *piping* system.
2. Installation of farm appliances and *equipment* such as brooders, dehydrators, dryers and irrigation *equipment*.
3. Raw material (feedstock) applications except for *piping* to special atmosphere generators.
4. Oxygen-fuel gas cutting and welding systems.
5. Industrial gas applications using gases such as acetylene and acetylenic compounds, hydrogen, ammonia, carbon monoxide, oxygen and nitrogen.
6. Petroleum refineries, pipeline compressor or pumping stations, loading terminals, compounding plants, refinery tank farms and natural gas processing plants.
7. Integrated chemical plants or portions of such plants where flammable or combustible liquids or gases are produced by, or used in, chemical reactions.
8. LP-gas installations at utility gas plants.
9. Liquefied natural gas (LNG) installations.
10. Fuel gas *piping* in power and atomic energy plants.
11. Proprietary items of *equipment*, apparatus or instruments such as gas-generating sets, compressors and calorimeters.
12. LP-gas *equipment* for vaporization, gas mixing and gas manufacturing.
13. Temporary LP-gas *piping* for buildings under construction or renovation that is not to become part of the permanent *piping* system.
14. Installation of LP-gas systems for railroad switch heating.

15. Installation of hydrogen gas, LP-gas and compressed natural gas (CNG) systems on vehicles.
16. Except as provided in Section 401.1.1, 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.
17. Building design and construction, except as specified herein.
18. *Piping* systems for mixtures of gas and air within the flammable range with an operating pressure greater than 10 psig (69 kPa gauge).
19. Portable fuel cell appliances that are neither connected to a fixed *piping* system nor interconnected to a power grid.

101.2.4 Other fuels. The requirements for the design, installation, maintenance, *alteration* and inspection of mechanical systems operating with fuels other than fuel gas shall be regulated by the *Dallas Mechanical Code*.

101.3 Administrative procedures. Except as otherwise specified in this code, all provisions of Chapter 52, “Administrative Procedures for the Construction Codes,” of the *Dallas City Code* apply to this code.

101.4 Referenced codes and standards. The codes and standards referenced in this code are considered part of the requirements of this code to the prescribed extent of each such reference only when such codes and standards have been specifically adopted by the city of Dallas. Whenever amendments have been adopted to the referenced codes and standards, each reference to the codes and standards is considered to reference the amendments as well. Any reference made to NFPA 70 or the *ICC Electrical Code* means the *Dallas Electrical Code*, as amended. References made to the *International Mechanical Code*, the *International Plumbing Code*, the *International Fire Code*, the *International Energy Conservation Code*, the *International Building Code*, the *International Existing Building Code*, the *International Residential Code*, the *International Green Construction Code*, and the *International Swimming Pool and Spa Code*, respectively mean the *Dallas Mechanical Code*, the *Dallas Plumbing Code*, the *Dallas Fire Code*, the *Dallas Energy Conservation Code*, the *Dallas Building Code*, the *Dallas Existing Building Code*, the *Dallas One- and Two-Family Dwelling Code*, the *Dallas Green Construction Code*, and the *Dallas Swimming Pool and Spa Code*, as amended. Where differences occur between provisions of this code and the referenced codes and standards, the provisions of this code apply.

Exception: Where enforcement of a code provision would violate the conditions of the listing of the equipment or appliance, the conditions of the listing and the manufacturer’s installation instructions apply.

101.5 Unsafe installations. An installation that is unsafe, constitutes a fire or health hazard, or is otherwise dangerous to human life, as regulated by this code, is hereby declared an unsafe installation. Use of an installation regulated by this code constituting a hazard to health, safety or welfare by reason of inadequate maintenance, dilapidation, fire hazard, disaster, damage or abandonment is hereby declared to be a public nuisance and must be abated by repair, rehabilitation, demolition or removal.”

2. Subsection [M] 306.5, “Equipment and Appliances on Roofs or Elevated Structures,” of Section 306 (IFGC), “Access and Service Space,” of Chapter 3, “General Regulations,” of the 2021 International Fuel Gas Code is amended to read as follows:

“[M] 306.5 Equipment and appliances on roofs or elevated structures. Where *equipment* requiring access or appliances are located on an elevated structure or the roof of a building such that personnel will have to climb higher than 16 feet (4877 mm) above grade to access such *equipment* or appliances, an interior or exterior means of access shall be provided. Exterior ladders providing roof access need not extend closer than 12 feet (2438 mm) to the finish grade or floor level below and shall extend to the equipment and appliance’s level service space. Such access shall not require climbing over obstructions greater than 30 inches (762 mm) in height or walking on roofs having a slope greater than 4 units vertical in 12 units horizontal (33-percent slope). Such access shall not require the use of portable ladders.

Permanent ladders installed to provide the required *access* shall comply with the following minimum design criteria:

1. The side railing shall extend above the parapet or roof edge not less than 30 inches (762 mm).
2. Ladders shall have rung spacing not to exceed 14 inches (356 mm) on center. The uppermost rung shall be not more than 24 inches (610 mm) below the upper edge of the roof hatch, roof or parapet, as applicable.
3. Ladders shall have a toe spacing not less than 6 inches (152 mm) deep.
4. There shall be not less than of 18 inches (457 mm) between rails.
5. Rungs shall have a diameter not less than 0.75-inch (19 mm) and be capable of withstanding a 300-pound (136.1 kg) load.
6. Ladders over 30 feet (9144 mm) in height shall be provided with offset sections and landings capable of withstanding 100 pounds per square foot (488.2 kg/m²). Landing dimensions shall be not less than 18 inches (457 mm) and not less than the width of the ladder served. A guard rail shall be provided on all open sides of the landing.

7. Climbing clearance. The distance from the centerline of the rungs to the nearest permanent object on the climbing side of the ladder shall be not less than 30 inches (762 mm) measured perpendicular to the rungs. This distance shall be maintained from the point of ladder access to the bottom of the roof hatch. A minimum clear width of 15 inches (381 mm) shall be provided on both sides of the ladder measured from the midpoint of and parallel with the rungs except where cages or wells are installed.
8. Landing required. The ladder shall be provided with a clear and unobstructed bottom landing area having a minimum dimension of 30 inches by 30 inches (762mm by 762 mm) centered in front of the ladder.
9. Ladders shall be protected against corrosion by *approved* means.
10. Access to ladders shall be provided at all times.

Catwalks installed to provide the required *access* shall be not less than 24 inches (610 mm) wide and shall have railings as required for service platforms.

Exception: This section shall not apply to Group R-3 *occupancies*.

[M] 306.5.1 Sloped roofs. Where appliances, *equipment*, fans or other components that require service are installed on a roof having a slope 3 units vertical in 12 units horizontal (25-percent slope) or greater and having an edge more than 30 inches (762 mm) above grade at such edge, a catwalk at least 16 inches in width with substantial cleats spaced not more than 16 inches apart shall be provided from the roof access to a level platform at the appliance. The level platform shall be provided on each side of the *appliance* or *equipment* to which *access* is required for service, repair or maintenance. The platform shall be not less than 30 inches (762 mm) in any dimension and shall be provided with guards. The guards shall extend not less than 42 inches (1067 mm) above the platform, shall be constructed so as to prevent the passage of a 21-inch-diameter (533 mm) sphere and shall comply with the loading requirements for guards specified in the Dallas [~~International~~] *Building Code*. *Access* shall not require walking on roofs having a slope greater than 4 units vertical in 12 units horizontal (33-percent slope). Where *access* involves obstructions greater than 30 inches (762 mm) in height, such obstructions shall be provided with ladders installed in accordance with Section 306.5 or stairways installed in accordance with the requirements specified in the Dallas [~~International~~] *Building Code* in the path of travel to and from appliances, fans or *equipment* requiring service.

[M] 306.5.2 Electrical requirements. A receptacle outlet shall be provided at or near the *appliance* location in accordance with NFPA 70.”

3. Subsection 401.5, “Identification,” of Section 401 (IFGC), “General,” of Chapter 4, “Gas Piping Installations,” of the 2021 International Fuel Gas Code is amended to read as follows:

“401.5 Identification. For other than steel pipe and CSST, 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 *piping* located in the same room as the *appliance* served. CSST shall be identified as required by ANSI LC 1/CSA 6.26.

Both ends of each section of medium pressure gas piping shall identify its operating gas pressure with an *approved* tag. The tags must be composed of aluminum or stainless steel and the following wording must be stamped into the tag:

WARNING

½ TO 5 psi gas pressure

Do Not Remove.”

4. Subsection 404.12, “Minimum Burial Depth,” of Section 404 (IFGC), “Piping System Installation,” of Chapter 4, “Gas Piping Installations,” of the 2021 International Fuel Gas Code is amended to read as follows:

“404.12 Minimum burial depth. Underground *piping* systems shall be installed a minimum depth of 18 [12] inches (458 [305] mm), measured from the top of the pipe to the existing [below] grade[; ~~except as provided for in Section 404.12.1].~~

~~**[404.12.1 Individual outside appliances.** Individual lines to outside lights, grills or other *appliances* shall be installed a minimum of 8 inches (203 mm) below finished grade, provided that such installation is *approved* and is installed in locations not susceptible to physical damage.]”~~

5. Subsection 406.4, “Test Pressure Measurement,” of Section 406 (IFGS), “Inspection, Testing and Purging,” of Chapter 4, “Gas Piping Installations,” of the 2021 International Fuel Gas Code 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. 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. Spring type gauges do not meet the requirement of a calibrated gauge.

406.4.1 Test pressure. The test pressure to be used shall be no less than ~~[1½ times the proposed maximum working pressure, but not less than]~~ 3 psig (20 kPa gauge). For tests requiring a pressure of 3 psig, diaphragm gauges must utilize a dial with a minimum diameter of 3 ½ inches, a set hand, 1/10 pound increments and pressure range not to exceed 6 psi for tests requiring a pressure of 3 psig. For tests requiring a pressure of 10 psig, diaphragm gauges must utilize a dial with a minimum diameter of 3 ½ inches, a set hand, a minimum of 2/10 pound increments and a pressure range not to exceed 20 psi. For welded piping, and for piping carrying gas at pressures in excess of 14 inches water column pressure (3.48 kPa) (1/2 psi) and less than 200 inches of water column pressure (52.2 kPa) (7.5 psi), the test pressure must not be less than 10 pounds per square inch (69.6 kPa). For piping carrying gas at a pressure that exceeds 200 inches of water column (52.2 kPa) (7.5 psi), the test pressure must be not less than one and one-half times the proposed maximum working pressure

Diaphragm gauges used for testing must display a current calibration and be in good working condition. The appropriate test must be applied to the diaphragm gauge used for testing. [, 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.]

406.4.2 Test duration. Test duration shall be held for a length of time satisfactory to the building official, but in no case for less than 15 minutes. For welded piping, and for piping carrying gas at pressures in excess of 14 inches water column pressure (3.48 kPa), the test duration must be held for a length of time satisfactory to the building official, but in no case for less than 30 minutes. ~~[not less than ½ hour for each 500 cubic feet (14 m³) of pipe volume or fraction thereof. When testing a system having a volume less than 10 cubic feet (0.28 m³) 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.]~~”

6. Subsection 409.1, “General,” of Section 409 (IFGC), “Shutoff Valves,” of Chapter 4, “Gas Piping Installations,” of the 2021 International Fuel Gas Code is amended by adding a new paragraph 409.1.4, “Valves in CSST Installations,” to read as follows:

“409.1.4 Valves in CSST installations. Shutoff valves installed with corrugated stainless steel (CSST) piping systems shall be supported with an *approved* termination fitting, or equivalent support, suitable for the size of the valves, of adequate strength and quality, and located at intervals so as to prevent or damp out excessive vibration but in no case greater than 12 inches from the center of the valve. Supports shall be installed so as not to interfere with the free expansion and contraction of the system’s piping, fittings, and valves between anchors. All valves and supports shall be designed and installed so they will not be disengaged by movement of the supporting piping.”

7. Subsection 621.2, “Prohibited Use,” of Section 621 (IFGC), “Unvented Room Heaters,” of Chapter 6, “Specific Appliances,” of the 2021 International Fuel Gas Code is amended to read as follows:

“621.2 Prohibited use. One or more unvented room heaters shall not be used as the sole source of comfort heating in a *dwelling unit*.

Exception: Existing approved unvented heaters may continue to be used in dwelling units, in accordance with the code provisions in effect when installed, when approved by the building official, unless an unsafe condition is determined to exist as described in Subsection 101.5.”

8. None of the appendices of the 2021 International Fuel Gas Code are adopted.

9. All chapters of the 2021 International Fuel Gas Code adopted by this ordinance are subchapters of Chapter 60 of the Dallas City Code, as amended.

10. All references in the 2021 International Fuel Gas Code to the fire code, building code, plumbing code, mechanical code, electrical code, residential code, existing building code, energy conservation code, green construction code, and swimming pool and spa code refer, respectively, to Chapters 16, 53, 54, 55, 56, 57, 58, 59, 61, and 62 of the Dallas City Code.

SECTION 2. That a person violating a provision of this ordinance, upon conviction, is punishable by a fine not to exceed \$2,000. No offense committed and no liability, penalty, or forfeiture, either civil or criminal, incurred prior to the effective date of this ordinance will be discharged or affected by this ordinance. Prosecutions and suits for such offenses, liabilities, penalties, and forfeitures may be instituted, and causes of action pending on the effective date of this ordinance may proceed, as if the former laws applicable at the time the offense, liability, penalty, or forfeiture was committed or incurred had not been amended, repealed, reenacted, or superseded, and all former laws will continue in effect for these purposes.

SECTION 3. That Chapter 60 of the Dallas City Code, as amended, will remain in full force and effect, save and except as amended by this ordinance. If any provision contained in Chapters 16, 52, 53, 54, 55, 56, 57, 58, 59, 61, and 62 relating to fuel gas work in the city is in conflict with any provision of Chapter 60, as adopted by this ordinance, the provisions of Chapter 60 will prevail, except that any existing structure, system, development project, or registration that is not required to come into compliance with a requirement of this ordinance will be governed by the requirement as it existed in the former law last applicable to the structure, system, development project, or registration, and all former laws will continue in effect for this purpose.

SECTION 4. That the terms and provisions of this ordinance are severable and are governed by Section 1-4 of Chapter 1 of the Dallas City Code, as amended.

SECTION 5. That this ordinance shall take effect on May 12, 2023, and it is accordingly so ordained.

APPROVED AS TO FORM:

TAMMY L. PALOMINO, Interim City Attorney

By _____
Assistant City Attorney

Passed _____