## Section 1.01 Designation of Code

The provisions of this Chapter, including the adopted portions of the International Plumbing Code and the International Fuel Gas Code, as amended, are hereby designated the Plumbing Code of the City of Arlington, also referred to in this Chapter as "the Code" or "this Code".

## Section 1.015 <u>Electronic Submittal of Final Plans and Other Documents</u>

Final plans or other documents required to be submitted under this Chapter and that will be archived must be submitted in an electronic format specified by the Director of Community Development and Planning ("CDP Director") as a condition to issuance of any type of permit, approval, or other action related to the final plans or documents. The City may provide an electronic conversion service for a fee in the amount set forth by City Council resolution. The CDP Director shall provide a schedule indicating which documents must be provided electronically, at which point during the approval process, and other information as necessary to implement an electronic archiving program.

## Section 1.02 Adoption of Code; Conflicts

- A. The International Plumbing Code, 2015 Edition, referred to in this Chapter as the "IPC" and the International Fuel Gas Code, 2015 Edition, referred to in this Chapter as the "IFGC", as adopted and published by the International Code Council are herein adopted and designated, together with the additions, deletions, and amendments hereinafter contained, as the Plumbing Code of the City, the same as though such Codes were copied at length herein. Copies of the IPC and IFGC adopted in this Section shall be kept on file in the office of the City Secretary.
- B. In the event of a conflict between the adopted provisions of the IPC and IFGC and other provisions of this Chapter, the other (non-IPC and non-IFGC) provisions of this Chapter shall be controlling.

#### Section 1.03 Intent

The purpose of this Code is to provide minimum standards to safeguard life, limb, health, property and the public welfare by regulating and controlling the design, construction, installation, quality of materials, location, operations and maintenance or use of piping systems, fixtures, plumbing equipment and systems used for water, sewage, and fuel gas plumbing systems.

# Section 1.04 Scope

A. The provisions of this code shall apply to the erection, installation, alteration, repairs, relocation, replacement, addition to, use or maintenance of plumbing systems within this jurisdiction. This code shall also regulate nonflammable medical gas, inhalation anesthetic, vacuum piping, nonmedical oxygen systems and sanitary and condensate vacuum collection systems. The installation of fuel gas distribution piping and equipment, fuel-gas-fired water heaters and water heater venting systems shall be regulated by the International Fuel Gas Code. Provisions in the appendices shall not apply unless specifically adopted.

Exception: Detached one- and two-family dwellings and multiple single-family dwellings (townhouses) not more than three stories high with separate means of egress and their accessory structures shall comply with the International Residential Code.

- B. This ordinance shall not be applied to work done by the employees of the City in the scope of their employment or other companies furnishing water in the laying of water mains and services and City sewer mains and services, or to the installation of gas distributing mains and services in the streets and alleys by employees of the gas distributing company, or any work performed by such gas distributing company on any piping or connection up to and including the outlet connections of the service meter. Nothing in this Code shall be construed as prohibiting an individual from negotiating with the gas company for the repairs, replacements, or installation of yard or service lines (that line carrying the unmeasured gas) on his/her premises or as requiring a license or bond from any gas company. Such work shall be performed by qualified employees of the gas company in accordance with all State and Federal regulations.
- C. If any section, subsection, sentence, clause or phrase of this code is for any reason held to be unconstitutional, such decision shall not affect the validity of the remaining portions of this code.

#### Section 1.06 Amendments, Additions and Deletions - IFGC

The adoption by reference of the International Fuel Gas Code, as provided in Section 1.02, is made subject to the following terms and is modified and amended as follows:

- A. By the addition of Article II of this Chapter.
- B. By the addition of Article III of this Chapter.
- C. By the amendment, deletion and addition of the following sections of the IFGC:
  - 1. The adoption of IFGC Appendices A, B and C.
  - 2. The deletion of IFGC Sections 101.1 and 101.4 in their entirety.

3. The amendment of IFGC Section 102.8, **Referenced codes and standards**, to read as follows:

**102.8 Referenced codes and standards.** The codes and standards referenced herein shall be those that are listed in Chapter 8 and such codes, when specifically adopted, and standards shall be considered part of the requirements of this code to the prescribed extent of each such reference. Where differences occur between provisions of this code and the referenced standards, the provisions of this code shall apply. Whenever amendments have been adopted to the referenced codes and standards, each reference to said code and standard shall be considered to reference the amendments as well. Any reference to NFPA 70 or National Electrical Code (NEC) shall mean the Electrical Code as adopted.

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 shall apply.

4. The amendment of IFGC Section 103.1, **General**, to read as follows:

**103.1 General.** The executive official in charge of fuel gas inspection shall be known as the Code Official.

- 5. The deletion of IFGC Section 103.2, **Appointment**, in its entirety.
- 6. The amendment of IFGC Section 104.1, **General**, to read as follows:

**104.1 General.** The code official shall enforce all of the provisions of the ordinance governing the fuel gas piping and shall act on any question relative to the installation, alteration, repair, maintenance or operation of systems, except as otherwise specifically provided for by statutory requirements or as provided for in Sections 104.2 through 104.7.

7. The amendment of IFGC Section 104.2, **Applications and permits**, to read as follows:

**104.2 Applications and permits.** A separate permit shall be obtained for each building or structure under the conditions stated in Article III, Section 3.01, et.seq., of this Chapter.

**104.2.1** A person commits an offense if he/she allows another to do or cause to be done any work under a permit other than the permittee or an employee of the permittee.

**104.2.2** After issuing a permit or granting approval of plans and specifications, the code official shall remain empowered to:

**104.2.2.1** Require the correction of errors in plans and specifications,

**104.2.2.2** Prevent the commencement or continuation of construction operations conducted under such plans and specifications when such operations are in violation of this Chapter or other ordinance.

**104.2.3** Every permit issued under this Chapter shall expire by limitation and become null and void if the work is suspended or abandoned for a period of one hundred eighty (180) days.

8. The amendment of IFGC Section 104.4, **Right of Entry**, to read as follows:

**104.4 Right of entry.** Whenever it is necessary to make an inspection to enforce the provisions of this chapter, or whenever the Code Official has reasonable cause to believe that there exists in any building or upon any premises any conditions or violations of this chapter that make the building or premises unsafe, unsanitary, dangerous or hazardous, the Code Official shall have the authority to enter the building or premises at all reasonable times to inspect or to perform the duties imposed upon the Code Official by this Chapter. If such building or premises is occupied, the Code Official shall present credentials to the occupant and request entry. If such building or premises is unoccupied, the Code Official shall first make a reasonable effort to locate the owner or other person having charge or control of the building or premises and request entry. If entry is refused, or if no owner or other person having charge or control of the building or premises can be located, the Code Official shall have the recourse to every remedy by law to secure entry.

9. The amendment of IFGC Section 106.6, **Fees**, to read as follows:

**106.6 Fees.** The standard for fee administration shall be as stated in IPC Section 106.6 as amended.

- 10. The deletion of IFGC Section 106.6.1, entitled **Work commencing before permit issuance**; IFGC Section 106.6.2, entitled **Fee schedule**; and IFGC Section 106.6.3, entitled **Fee refunds**, in their entirety.
- 11. The amendment of IFGC Section 108.2, entitled **Notice of violation**, to read as follows:

**108.2 Notice of violation.** The Code Official is authorized to serve a notice of violation or order to the person responsible for the erection, installation, alteration, extension, repair, removal or demolition of work in violation of the provisions of this Chapter, or in violation of a detail statement or the approved construction documents thereunder, or in violation of a permit or certificate issued under the provisions of this Chapter. Such order shall direct the discontinuance of the illegal action or condition and the abatement of the violation.

- 12. The deletion of IFGC Section 108.3, entitled **Prosecution of violation**, in its entirety.
- 13. The amendment of IFGC Section 108.4, **Violation penalties**, to read as follows:

**108.4 Violation penalties.** The provisions for violations of this code shall be as specified in IPC Section 108.4 at Section 1.05 of this Chapter.

14. The amendment of IFGC Section 108.5, **Stop work orders**, to read as follows:

**108.5 Stop work orders.** The provisions for stop work orders shall be the same as Section 108.5 of the International Plumbing Code, as amended by this Chapter.

15. The amendment of IFGC Section 108.6, **Abatement of violation**, to read as follows:

**108.6 Abatement of violation.** A fuel gas piping system found by the Code Official to be in violation of the Chapter is hereby declared to be a nuisance. The Code Official shall be empowered to abate such nuisances in the manner provided by Article IV of the "Nuisance" Chapter of the Code of the City of Arlington.

- 16. The deletion of IFGC Section 109, **Means of Appeal**, in its entirety.
- 17. The amendment of Section 306.3, entitled **Appliances in attics**, to read as follows:

**306.3 Appliances in attics.** Attics containing appliances shall be provided with an opening and unobstructed passageway large enough to allow removal of the largest appliance. The passageway shall be not less than 30 inches (762 mm) in height and 22 inches (559 mm) in width and not more than 20 feet (6096 mm) in length when measured along the centerline of the passageway from the opening to the appliance. The passageway shall have continuous solid flooring not less than 24 inches (610 mm) in width. A

level service space of not less than 30 inches (762 mm) in length and 30 inches (762 mm) in width shall be present at the font or service side of the appliance. The clear access opening dimensions shall be not less than 20 inches by 30 inches (508 mm by 762 mm) where such dimensions are large enough to allow removal of the largest appliance. A walkway to an appliance shall be rated as a floor as approved by the building official. As a minimum, for access to the attic space, provide one of the following:

- 1. A permanent stair.
- 2. A pull down stair with a minimum 300 lb (136 kg) capacity.
- 3. An access door from an upper floor level.
- 4. Access Panel may be used in lieu of items 1, 2, and 3 with prior approval of the code official due to building conditions.

Exceptions:

- 1. The passageway and level service space are not required where the appliance is capable of being serviced and removed through the required opening.
- 2. Where the passageway is not less than ... {bulk of section to read the same}.
- 18. The amendment of Section 306.5, entitled **Equipment and appliances on roofs or elevated structures**, to read as follows:

**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, a permanent interior or exterior means of access shall be provided. Permanent 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 appliances' level service space. Such access shall . . . {*bulk of section to read the same*} . . . on roofs having a slope greater than 4 units vertical in 12 units horizontal (33-percent slope). ... {*bulk of section to read the same*}.

19. The amendment of Section 306.5.1, entitled **Sloped roofs**, to read as follows:

**306.5.1 Sloped roofs.** Where appliances, equipment, fans or other components that require service are installed on a roof having a slope of 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 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 International Building Code.

20. The addition of Section 306.7, entitled **Water heaters above ground or floor**, to read as follows:

**306.7 Water heaters above ground or floor.** When the attic, roof, mezzanine or platform in which a water heater is installed is more than eight (8) feet (2438 mm) above the ground or floor level, it shall be made accessible by a stairway or permanent ladder fastened to the building.

21. The amendment of IFGC Section 401.5, **Identification**, to read as follows:

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

Both ends of each section of medium pressure corrugated stainless steel tubing (CSST) shall identify its operating gas pressure with an approved tag. The tags are to be composed of aluminum, brass or stainless steel and the following wording shall be stamped into the tag:

## "WARNING 1/2 to 5 psi gas pressure DO NOT REMOVE"

22. The amendment of IFGC Section 401.7, **Piping meter identification requirements**, to read as follows:

**401.7 Piping meter identification requirements.** Piping from multiple meter installations shall be marked with aluminum, brass or stainless steel tags indicating address served so the piping system supplied by each meter is readily identifiable.

23. The amendment of IFGC Section 402.3, **Sizing**, to add an exception to read as follows:

Exception: Corrugated stainless steel tubing (CSST) shall be a minimum of  $\frac{1}{2}$ ".

24. The addition of Section 404.5.1, **Additional protection of CSST piping**, to read as follows:

**404.5.1 Additional protection of CSST piping.** Where Corrugated Stainless Steel Tubing (CSST) piping is installed in exterior wall cavities, insulated wall cavities and/or insulated roof/ceiling assemblies, the CSST piping must be protected for its entire length with flexible metal conduit (per the UL-1 Standard or its equivalent), Schedule 40 steel pipe, or approved strike plates. The additional protection must extend a minimum of 18 inches (457.2 mm) beyond where the CSST piping exits the wall cavities and/or the roof/ceiling assemblies

25. The amendment of IFGC Section 404.12, **Minimum burial depth**, to read as follows:

**404.12 Minimum burial depth.** Underground piping systems shall be installed a minimum depth of 18 inches (458 mm) below grade.

26. The amendment of Section 406.1, entitled **General**, to read as follows:

**406.1 General.** Prior to acceptance and initial operation, all piping installations shall be inspected and pressure tested to determine that the materials, design, fabrication, and installation practices comply with the requirements of this code. The permit holder shall make the applicable tests prescribed in Sections 406.1.1 through 406.1.5 to determine compliance with the provisions of this code. The permit holder shall give reasonable advance notice to the code official when the piping system is ready for testing. The equipment, material, power and labor necessary for the inspections and test shall be furnished by the permit holder and the permit holder shall be responsible for determining that the work will withstand the test pressure prescribed in the following tests.

27. The amendment of Section 406.4, entitled **Test pressure measurement**, to read as follows:

**406.4 Test pressure measurement.** Test pressure shall be measured with a monometer 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.

28. The amendment of Section 406.4.1, entitled **Test pressure**, to read as follows:

**406.4.1 Test pressure.** The test pressure to be used shall be no less than 3 psig (20 kPa gauge), or at the discretion of the Code Official, the piping and valves may be tested at a pressure of at least six (6) inches (152 mm) of mercury, measured with a manometer or slope gauge. For tests requiring a pressure of 3 psig, diaphragm gauges shall utilize a dial with a minimum diameter of three and one half inches (3 1/2"), a set hand, 1/10 pound incrementation 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 shall utilize a dial with a minimum diameter of three and one-half inches (3 <sup>1</sup>/<sub>2</sub>"), a set hand, a minimum of 2/10 pound incrementation and a pressure range not to exceed 20 psi. For welded piping, and for piping carrying gas at pressures in excess of fourteen (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 shall not be less than ten (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 shall 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.

29. The amendment of Section 406.4.2, entitled **Test duration**, to read as follows:

**406.4.2 Test duration.** Test duration shall be\_held for a length of time satisfactory to the Code Official, but in no case for less than fifteen (15) minutes. For welded piping, and for piping carrying gas at pressures in excess of fourteen (14) inches water column pressure (3.48 kPa), the test duration shall be held for a length of time satisfactory to the Code Official, but in no case for less than thirty (30) minutes. {*Delete remainder of section.*}

30. The amendment of IFGC Section 409 to add Section 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. Supports shall be 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.

31. The amendment of Section 410.1, **Pressure regulators**, to a second paragraph and exception to read as follows:

Access to regulators shall comply with the requirements for access to appliances as specified in Section 306.

Exception: A passageway or level service space is not required when the regulator is capable of being serviced and removed through the required attic opening.

32. The amendment of IFGC Section 621.2, **Prohibited use**, 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 Code Official unless an unsafe condition is determined to exist as described in IFGC Section 108.7