# Recommended Amendments to the 2015 International Fuel Gas Code

North Central Texas Council of Governments Region

The following sections, paragraphs, and sentences of the 2015 International Fuel Gas Code are hereby amended as follows: Standard type is text from the IFGC. <u>Underlined type is text inserted.</u> <u>Lined through type is deleted text from IFGC.</u> A double asterisk at the beginning of a section identifies an amendment carried over from the 2012 edition of the code and a triple asterisk identifies a new or revised amendment with the 2015 code.

#### \*\*Section 101.2

{Local amendments to Section 101.2 may be necessary to correspond with the State Plumbing Licensing Law.}

### \*\*Section 102.2; add an exception to read as follows:

**Exception:** Existing dwelling units shall comply with Section 621.2.

(Reason: Previous code provisions made unvented heater provisions retroactive except as provided for in local amendment. This amendment and amendment to IFGC 621.2 better clarify what the code already states: existing systems may stay unless considered unsafe.)

#### \*\*Section 102.8; change to read as follows:

**102.8 Referenced codes and standards.** The codes and standards referenced in this code 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 the ICC Electrical Code shall mean the Electrical Code as adopted.

(Reason: Legal wording to recognize locally adopted codes and amendments adopted with referenced codes.)

#### \*\*Section 306.3; change to read as follows:

[M] 306.3 Appliances in attics. Attics containing appliances shall be provided . . . {bulk of paragraph unchanged} . . . side of the appliance. The clear access opening dimensions shall be a minimum of 20 inches by 30 inches (508 mm by 762 mm), and or larger where such dimensions are not 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}.

(Reason: To provide a safe means of accessibility to appliances in attics and to allow for different types of construction limitations. Consistent with regional amendment to IMC 306.3.)

\*\*Section 306.5; change 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, an a permanent interior or exterior means of access shall be provided. Permanent exterior ladders providing roof access need not extend closer than-8-12 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}.

(Reason: To assure safe access to roof appliances. Consistent with IMC amendments.)

\*\*Section 306.5.1; change to read as follows:

**[M]** 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 <u>catwalk at least 16 inches in width with substantial cleats spaced not more than 16 inches apart shall be provided from the <u>roof access to a level platform at the appliance. The</u> 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*.</u>

(Reason: To assure safe access to roof appliances. Consistent with IMC amendments.)

\*\*Section 306; add Section 306.7 with exception and subsection 306.7.1 to read as follows:

<u>306.7 Water heaters above ground or floor.</u> 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.

(Reason: To provide more stringent safe access to water heaters. Consistent with regional amendments to IPC 502.5 and IMC 306.6.)

\*\*Section 401.5; add a second paragraph to read as follows:

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

"WARNING 1/2 to 5 psi gas pressure Do Not Remove"

(Reason: To protect homeowners and plumbers.)

\*\*Section 402.3; add an exception to read as follows:

**Exception:** Corrugated stainless steel tubing (CSST) shall be a minimum of 1/2" (18 EHD).

(Reason: Pipe less than 1/2" has a history in this region of causing whistling.)

## \*\*Section 404.12; change to read as follows:

**404.12 Minimum burial depth.** Underground piping systems shall be installed a minimum depth of 12 18 inches (305 458 mm) top of pipe below grade, except as provided for in Section 404.12.1.

(Reason: To provide increased protection to piping systems and address reference number change.)

#### \*\*Section 406.1; change 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.

(Reason: To utilize language used in the IPC regarding who is responsible for testing procedures.)

#### \*\*Section 406.4; change 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. 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.

(Reason: To require the use of more accurate diaphragm gauges. Spring gauges do not provide accurate measurement below approximately 17 psig.)

#### \*\*Section 406.4.1; change to read as follows:

406.4.1 Test pressure. The test pressure to be used shall be no less than 4 1/2 times the proposed maximum working pressure, but no less than 3 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. 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. 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 ½"), 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 ½"), 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.

<u>Diaphragm gauges used for testing must display a current calibration and be in good working condition.</u>

The appropriate test must be applied to the diaphragm gauge used for testing.

(Reason: To provide for lesser pressures to coordinate with the use of more accurate diaphragm gauges.)

**406.4.2 Test duration.** Test duration shall be <u>held for a length of time satisfactory to the Code Official</u>, but in no case for less than fifteen (15) minutes. For welded piping, and for piping carrying gas at

<sup>\*\*</sup>Section 406.4.2; change to read as follows:

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.)

(Reason: To comply with accepted regional practices.)

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.

(Reason: To provide proper security to CSST valves. These standards were established in this region in 1999 when CSST was an emerging technology.)

\*\*Section 410.1; add a second paragraph and exception to read as follows:

<u>Access to regulators shall comply with the requirements for access to appliances as specified in Section</u> 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.

(Reason: To require adequate access to regulators.)

\*\*Section 621.2; add exception 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 Section 108.7.

(Reason: Gives code official discretion.)

END

<sup>\*\*</sup>Section 409.1; add Section 409.1.4 to read as follows: