City of Mansfield

Amendments to the 2018 International Fuel Gas Code

North Central Texas Council of Governments Region

The following sections, paragraphs, and sentences of the 2018 International Fuel Gas Code (IFGC) are hereby amended as follows: Standard type is text from the IFGC. Underlined type is text inserted. Strikeouts indicate existing words and phrases to be deleted from the IFGC. A double asterisk (**) at the beginning of a section identifies an amendment carried over from previous code cycles and a triple asterisk (***) identifies a new or revised amendment with the 2018 code.

**Section 101.1; change to read as follows:

101.1 Title. These regulations shall be known as the Fuel Gas Code of the <u>City of Mansfield</u> hereinafter referred to as "this code."

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

Exception: Existing dwelling units shall comply with Section 621.2.

(Reason: Previous code revisions 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 as part of the requirements of this code to the prescribed extent of each such reference and as further regulated in Sections 102.8.1 and 102.8.2. 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 *Electrical Code* shall mean the *Electrical Code* as adopted.

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

**Section 106.6.2; change to read as follows:

106.6.2 Fee schedule. Fees for all work shall be in accordance with the City of Mansfield permit fee schedule.

**Section 106.6.3; change #2 and #3 to read as follows:

106.6.3 Fee refunds. The code official shall authorize the refunding of fees as follows.

- 1. The full amount of any fee paid hereunder which was erroneously paid or collected.
- 2. Not more than <u>80 percent (80%)</u> of the permit fee paid when no work has been done under a permit issued in accordance with this code.

The code official shall not authorize the refunding of any fee paid, except upon written application filed by the original permittee not later than 180 days after the date of fee payment.



(Reason: The need to establish an amount for fee refunds.)

**Add Section 106.6.4 to read as follows:

106.6.4 Reinspection fees. A reinspection fee may be assessed at the inspector's discretion for each inspection when:

- 1. The inspection called for is not ready when the inspector arrives;
- No building address or permit card is clearly posted;
- 3. Such portion of work for which inspection is called is not complete or when corrections called for are not made;
- 4. City approved plans are not on the job site available to the inspector;
- 5. Any work concealed without first obtaining the required inspection(s);
- 6. The building is locked or work otherwise not available for inspection when called;
- 7. The job site is red-tagged twice for the same item;
- 8. The original red tag has been removed from the job site.
- 9. Failure to maintain erosion control, trash control or tree protection.

In instances where reinspection fees have been assessed, no additional inspection of the work will be performed until the required fees have been paid. Reinspection fees shall be in accordance with the City of Mansfield building permit fee schedule.

(Reason: This fee is not a fine or penalty but is designed to compensate for time and trips when inspections are called for when not ready.)

**Section 108.4; change to read as follows:

108.4 Violation penalties. Persons who shall violate a provision of this code or shall fail to comply with any of the requirements thereof or who shall erect, install, alter or repair plumbing work in violation of the approved construction documents or directive of the code official, or of a permit or certificate issued under the provisions of this code, shall be guilty of a <u>misdemeanor</u>, punishable by a fine of not more than <u>two thousand dollars (\$2,000)</u>. erection by imprisonment not exceeding [number of days], or both such fine and imprisonment. Each day that a violation continues after due notice has been served shall be deemed a separate offense.

(Reason: To specify the type of offense and dollar amount of fine.)

108.5 Stop work orders. Upon notice from the code official that work that is being performed contrary to the provisions of this code or in a dangerous or unsafe manner, such work shall immediately cease. Such notice shall be in writing and shall be given to the owner of the property, the owner's authorized agent, or to the person doing the work. The notice shall state the conditions under which work is authorized to resume. Where an emergency exists, the code official shall not be required to give a written notice prior to stopping the work. Any person who shall continue any work on the system after having been served with a stop work order, except such work as that person is directed to perform to remove a violation or unsafe condition, shall be liable for a fine of not less than as specified in Section 108.4.

(Reason: To specify the dollar amount of fine.)

^{**}Section 108.5; change to read as follows:

**Section 109; delete entire section and insert the following:

SECTION 109 MEANS OF APPEAL

109.1 Application for appeal. Any person shall have the right to appeal a decision of the code official to the board of appeals established by ordinance. The board shall be governed by the enabling ordinance.

(Reason: Most jurisdictions already have an ordinance establishing and governing an appeals board for this code.)

**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 not less than 20 inches by 30 inches (508 mm by 762 mm), and large enough to allow removal of the largest appliance. 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. An 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 unobstructed and not less than 6 feet (1829 mm) high and 22 inches wide for its entire length, the passageway shall be not greater than 50 feet (15 250 mm) in length.

(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 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).... {remainder of text unchanged}.

(Reason: To assure safe access to roof appliances. Consistent with regional amendment to IMC 306.5.)

[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 three 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 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</u>

^{**}Section 306.5.1; change to read as follows:

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...* {remainder of text unchanged}.

(Reason: To assure safe access to roof appliances. Consistent with regional amendment to IMC 306.5.1)

**Section 404.2; 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 - ½ to 5 psi gas pressure - Do Not Remove"

(Reason: To protect homeowners and plumbers. Consistent with regional amendment to IRC G2415.2)

**Section 404.7; add a second paragraph to read as follows:

404.7 Protection against physical damage. Where piping will be concealed within light-frame construction assemblies, the piping shall be protected against penetration by fasteners in accordance with Sections 404.7.1 through 404.7.3.

Where corrugated stainless steel tubing (CSST) is installed in a concealed location and parallel to any stud, joist, rafter, or similar member or above the top plates adjacent to the roof deck it shall be encased in a protective metal pipe made of schedule 40 steel, iron pipe or in a protective flexible pipe sleeve listed by the manufacturer to a point a minimum of six feet (6') (1829 mm) into the attic space clear of any insulation or ceiling assemblies.

Exception: Black steel piping and galvanized steel piping shall not be required to be protected.

(Reason: To provide added protection against physical damage in concealed locations and areas with close proximity to roof decks. Consistent with local amendment to IRC G2415.7)

**Section 404.12 and 404.12.1; change to read as follows:

404.12 Minimum burial depth. Underground *piping systems* shall be installed a minimum depth of 12 inches (305 mm) 18 inches (457 mm) to the top of pipe below grade, except as provided for in Section 404.12.1.

404.12.1 Individual outdoor appliances; delete in its entirety.

(Reason: To provide increased protection to piping systems.)

**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. Gauges shall be calibrated annually and have a current calibration sticker affixed to the gauge. 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 not less than 1½ times the proposed maximum working pressure, but not 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. 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.)

**Section 406.4.2; change to read as follows:

406.4.2 Test duration. Test duration shall be not less than ½ hour for each 500 feet cubic feet (14 m³) of pipe volume or fraction thereof. When testing a system havig a volume less than 10 cubic feet (0.28 m³) or a sytem 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. 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.

(Reason: To comply with accepted regional practices. Consistent with regional amendment to IRC G2417.4.2)

**Section 409.1; add Section 409.1.4 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.

(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:

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.

(Reason: To require adequate access to regulators. Consistent with regional amendment to IRC G2421.1)

**Section 621.2; add exception 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 Section 108.7.

(Reason: Gives code official discretion. Consistent with regional amendment to IRC G2445.2.)

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