

COMMUNITY DEVELOPMENT & NEIGHBORHOOD SERVICES

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2018 IFGC AMENDMENTS

Adopted: January 12th, 2019

ORDINANCE NO. 156, 2018 OF THE COUNCIL OF THE CITY OF FORT COLLINS AMENDING CHAPTER 5, ARTICLE IV OF THE CODE OF THE CITY OF FORT COLLINS FOR THE PURPOSE OF REPEALING THE 2015 INTERNATIONAL FUEL GAS CODE AND ADOPTING THE 2018 INTERNATIONAL FUEL GAS CODE, WITH AMENDMENTS

WHEREAS, since 1924, the City has reviewed, amended and adopted the latest nationally recognized building standards available for the times; and

WHEREAS, upon recommendation of City staff, the City Council has determined that it is in the best interests of the City to align seven interconnected basic construction codes under one publication year; and

WHEREAS, the seven interconnected basic construction codes are the International Building Code, International Residential Code, International Mechanical Code, International Fuel Gas Code, International Energy Conservation Code, and International Property Maintenance Code; and

WHEREAS, the City Council has determined that the 2018 publication year of the seven interconnected basic construction codes ought to be adopted and that any counterpart codes previously adopted should be repealed, both in order to align the publication years of the codes and also because the 2018 publications contain improvements in construction code regulation; and

WHEREAS, City staff has conducted a significant public outreach program, working with the regulated construction industry and building professionals; and

WHEREAS, the adoption of the seven interconnected basic construction codes has been presented to and recommended by the Board of Realtors, Water Board, Energy Board, Commission on Disability, Natural Resource Advisory Board, Poudre Fire Authority Board, Building Review Board, Affordable Housing Board, Air Quality Advisory Board, Northern Colorado Home Builder Association and the Chamber of Commerce; and

WHEREAS, the City Council has determined that it is in the best interest of the health, safety and welfare of the City and its citizens that the 2015 International Fuel Gas Code, as previously adopted and amended by the City pursuant to Ordinance No. 072, 2017, be repealed and that in its place, the 2018 International Fuel Gas Code be adopted, with local amendments as set forth in this Ordinance; and

WHEREAS, pursuant to the City Charter II, Section 7, City Council may enact any ordinance which adopts a code by reference in whole or in part provided that before adoption of such ordinance the Council hold a public hearing thereon and that notice of the hearing is published twice in a newspaper of general circulation published in the City, with one of such publications occurring at least eight (8) days preceding the hearing and the other publication occurring at least fifteen (15) days preceding the hearing; and

WHEREAS, in compliance with Article II, Section 7, the City Clerk published in the Fort Collins *Coloradoan* such notice of hearing concerning adoption of the 2018 International Building Code on November 18, 2018, and November 25, 2018; and

WHEREAS, attached as Exhibit "A" and incorporated herein by reference is the Notice of Public Hearing dated November 18, 2018, that was so published and which the Council hereby finds meets the requirements of Article II, Section 7 of the City Charter.

NOW, THEREFORE, BE IT ORDAINED BY THE COUNCIL OF THE CITY OF FORT COLLINS as follows:

Section 1. That the City Council hereby makes and adopts the determinations and findings contained in the recitals set forth above.

Section 2. That Section 5-111 of the Code of the City of Fort Collins is hereby amended to read as follows:

Sec. 5-111. Adoption of standards for fuel gas piping, equipment and accessories.

Pursuant to the power and authority conferred on the City Council by Section 31-16-202, C.R.S., and Article II, Section 7 of the Charter, the City Council hereby repeals the 2012 International Fuel Gas Code (2012 IFGC), and adopts, as the fuel gas code of the City, the 2018 International Fuel Gas Code (2018 IFGC), published by the International Code Council, which shall have the same force and effect as though set forth in full herein except as amended pursuant to Section 5-112 of the City Code. The subject matter of the 2018 International Fuel Gas Code (2018 IFGC) adopted herein includes comprehensive regulations governing the design, installation, maintenance, alteration and inspection of fuel gas piping systems, fuel gas utilization equipment and related accessories for the purposes of protecting public health, safety and general welfare. None of the 2018 International Fuel Gas Code Appendices are hereby adopted.

Section 3. That Section 5-112 of the Code of the City of Fort Collins is hereby repealed and reenacted to read in its entirety as follows:

Sec. 5-112. Amendments and deletions to the 2018 International Fuel Gas Code.¹

The 2018 INTERNATIONAL FUEL GAS CODE adopted in § 5-111 is hereby amended in the following respects:

(1) Section 101.1 Title is hereby retained in its entirety with the following amendments:

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

¹ Changes to the 2018 International Fuel Gas Code are shown as follows: inserted language is highlighted in yellow and deleted language is shown as stricken.

(2) Section 102.8 reference codes and standards is hereby retained in its entirety with the following amendments:

Section 102.8 reference codes and standards The codes and standards referenced in this *code* shall be those that are *listed* in Chapter 8 Section 101.4 of the adopted *International Building Code*, entitled "Referenced codes," and such codes and standards shall be considered to be 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.

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.

(3) Section 103 Department of Inspection is hereby deleted and replaced in its entirety and the following is hereby added in lieu thereof:

SECTION 103 DEPARTMENT OF INSPECTION

103.1 General.

The Department of Inspection is hereby created and the executive official in charge thereof shall be known as the code official.

103.2 Appointment.

The code official shall be appointed by the chief appointing authority of the jurisdiction. **103.3 Deputies.**

In accordance with the prescribed procedures of this jurisdiction and with the concurrence of the appointing authority, the code official shall have the authority to appoint a deputy code official, other related technical officers, inspectors and other employees. Such employees shall have powers as delegated by the code official.

103.4 Liability.

The code official, member of the board of appeals or employee charged with the enforcement of this code, while acting for the jurisdiction in good faith and without malice in the discharge of the duties required by this code or other pertinent law or ordinance, shall not thereby be rendered civilly or criminally liable personally, and is hereby relieved from all personal liability for any damage accruing to persons or property as a result of an act or by reason of an act or omission in the discharge of official duties.

103.4.1 Legal defense.

Any suit or criminal complaint instituted against any officer or employee because of an act performed by that officer or employee in the lawful discharge of duties and under the provisions of this code shall be defended by the legal representatives of the jurisdiction until the final termination of the proceedings. The code official or any subordinate shall not be liable for costs in an action, suit or proceeding that is instituted in pursuance of the provisions of this code.

SECTION 103 – CODE ADMINISTRATION

103.1 Entity charged with *code* **administration.** The entity charged with *code* administration shall be as determined in accordance with Section 103 of the adopted *International Building Code*, entitled "Code Administration," as amended and set forth in Section 5-27(3) of the City Code.

(4) Section 106.1.1 Annual permit is hereby deleted in its entirety:

106.1.1 Annual permit. Instead of an individual construction permit for each alteration to an already approved system or equipment installation, the code official is authorized to issue an annual permit upon application therefor to any person, firm or corporation regularly employing one or more qualified tradespersons in the building, structure or on the premises owned or operated by the applicant for the permit.

(5) Section 106.1.2 Annual permit records is hereby deleted in its entirety:

106.1.2 Annual permit records. The person to whom an annual permit is issued shall keep a detailed record of alterations made under such annual permit. The code official shall have access to such records at all times or such records shall be filed with the code official as designated.

(6) Section 106.6 Fees is hereby deleted and replaced in its entirety and the following is hereby added in lieu thereof:

106.6 Fees. A permit shall not be issued until the fees prescribed in Section 106.6.2 have been paid, nor shall an amendment to a permit be released until the additional fee, if any, due to an increase of the installation, has been paid.

106.6 Fees. All items relating to fees shall be as specified in Section 109 of the adopted *International Building Code*, entitled "Fees."

(7) Section 106.6.1 Work commencing before permit issuance is hereby deleted in its entirety:

106.6.1 Work commencing before permit issuance. Any person who commences work on an installation before obtaining the necessary permits shall be subject to 100 percent of the usual permit fee in addition to the required permit fees.

(8) Section 106.6.2 Fee schedule is hereby deleted in its entirety:

106.6.2 Fee schedule. The fees for work shall be as indicated in the following schedule. [JURISDICTION TO INSERT APPROPRIATE SCHEDULE]

(9) Section 106.6.3 Fee refunds is hereby deleted in its entirety:

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 that was erroneously paid or collected.
2. Not more than [SPECIFY PERCENTAGE] percent of the permit fee paid where work

has not been done under a permit issued in accordance with this code.

3. Not more than [SPECIFY PERCENTAGE] percent of the plan review fee paid where an application for a permit for which a plan review fee has been paid is withdrawn or canceled before any plan review effort has been expended.

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.

(10) Section 108.4 Violation penalties is hereby retained in its entirety with the following amendments:

108.4 Violation penalties. Persons who shall violate a provision of this code, fail to comply with any of the requirements thereof or erect, install, alter or repair 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 [SPECIFY OFFENSE], punishable by a fine of not more than [AMOUNT] dollars or by imprisonment not exceeding [NUMBER OF DAYS], or both such fine and imprisonment. misdemeanor subject to the penalties and fines specified in Section 1-15 of the City Code. Each day that a violation continues after due notice has been served shall be deemed a separate offense.

(11) A new *Section 108.4.1 Work commencing before permit issuance* is hereby added to read as follows:

108.4.1 Work commencing before permit issuance. In addition to the penalties set forth in Section 108.4, any person or firm who, before obtaining the necessary permit(s), commences any construction of, or work on, a building, structure, electrical, gas, mechanical or plumbing system that is not otherwise exempted from obtaining a permit, shall be subject to a fine in addition to the standard prescribed permit fee. Said fine shall be equal in amount to the permit fee, except that it shall not be less than \$50 nor more than \$1,000 for the first such violation. A person or firm committing the same such violation repeatedly shall be subject to a fine equal to double the amount of the permit fee or double the amount of the fee imposed for the preceding violation, whichever is greater, for every such subsequent violation committed within 180 days of a previous violation. Said fines may be appealed to the City Manager pursuant to Chapter 2, Article VI of the City Code.

(12) Section 109 Means Of Appeal is hereby deleted in its entirety and the following is hereby added in lieu thereof:

109.1 Application for appeal.

A person shall have the right to appeal a decision of the code official to the board of appeals. An application for appeal shall be based on a claim that the true intent of this code or the rules legally adopted thereunder have been incorrectly interpreted, the provisions of this code do not fully apply or an equally good or better form of construction is proposed. The application shall be filed on a form obtained from the code official within 20 days after the notice was served.

109.2 Membership of board.

The board of appeals shall consist of five members appointed by the chief appointing authority as follows: one for 5 years; one for 4 years; one for 3 years; one for 2 years and one for 1 year. Thereafter, each new member shall serve for 5 years or until a successor has been appointed.

109.2.1 Qualifications.

The board of appeals shall consist of five individuals, one from each of the following professions or disciplines.

1. Registered design professional who is a registered architect; or a builder or superintendent of building construction with not less than 10 years'

experience, 5 of which shall have been in responsible charge of work.

2. Registered design professional with structural engineering or architectural experience.

3. Registered design professional with fuel gas and plumbing engineering experience; or a fuel gas contractor with not less than 10 years' experience, 5 of

which shall have been in responsible charge of work.

4. Registered design professional with electrical engineering experience; or an electrical contractor with not less than 10 years' experience, 5 of which shall

have been in responsible charge of work.

5. Registered design professional with fire protection engineering experience; or a fire protection contractor with not less than 10 years' experience, 5 of

which shall have been in responsible charge of work.

-109.2.2 Alternate members.

The chief appointing authority shall appoint two alternate members who shall be called by the board chairman to hear appeals during the absence of disqualification of a member. Alternate members shall possess the qualifications required for board membership and shall be appointed for 5 years, or until a successor has been appointed.

109.2.3 Chairman. The board shall annually select one of its members to serve as chairman.

109.2.4 Disqualification of member.

A member shall not hear an appeal in which that member has a personal, professional or financial interest.

-109.2.5 Secretary.

The chief administrative officer shall designate a qualified clerk to serve as secretary to the board. The secretary shall file a detailed record of all proceedings in the office of the chief administrative officer.

109.2.6 Compensation of members.

Compensation of members shall be determined by law.

109.3 Notice of meeting.

The board shall meet upon notice from the chairman, within 10 days of the filing of an appeal, or at stated periodic meetings.

109.4 Open hearing.

Hearings before the board shall be open to the public. The appellant, the appellant's representative, the code official and any person whose interests are affected shall be given an opportunity to be heard.

109.4.1 Procedure.

The board shall adopt and make available to the public through the secretary procedures

under which a hearing will be conducted. The procedures shall not require compliance with strict rules of evidence, but shall mandate that only relevant information be received.

-109.5 Postponed hearing.

When five members are not present to hear an appeal, either the appellant or the appellant's representative shall have the right to request a postponement of the hearing.

109.6 Board decision.

The board shall modify or reverse the decision of the code official by a concurring vote of three members.

109.6.1 Resolution.

The decision of the board shall be by resolution. Certified copies shall be furnished to the appellant and to the code official.

109.6.2 Administration.

The code official shall take immediate action in accordance with the decision of the board. **109.7 Court review.**

Any person, whether or not a previous party to the appeal, shall have the right to apply to the appropriate court for a writ of certiorari to correct errors of law. Application for review shall be made in the manner and time required by law following the filing of the decision in the office of the chief administrative officer.

109 Means of Appeal. Appeals of decisions, determinations and interpretations of this *code* shall be made pursuant to the applicable provisions of Section 113 of the adopted *International Building Code*, entitled "Board of Appeals."

(13) Section 301.3 Listed and labeled is hereby retained in its entirety with the following amendments:

301.3 Listed and labeled. Appliances regulated by this code shall be *listed* and *labeled* for the application in which they are used unless otherwise *approved* in accordance with Section 105. The approval of unlisted *appliances* in accordance with Section 105 shall be based on *approved* engineering evaluation.

- (14) Section 303.3 Prohibited locations is hereby retained in its entirety with the following amendments:
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3. A single wall mounted unvented room heater is installed in a bathroom and such unvented room heater is equipped as specified in Section 621.6 and has an input rating not greater than 6,000 Btu/h (1.76 kW). The bath room shall meet the required volume criteria of Section 304.5.

4. A single wall mounted unvented room heater is installed in a bedroom and such unvented room heater is equipped as specified in Section 621.6 and has an input rating not greater than 10,000 Btu/h (2.93 kW). The bedroom shall meet the required volume criteria of Section 304.5.

5. 3. The *appliance* is installed in a room or space that opens only into a bedroom or bathroom, and such room or space is used for no other purpose and is provided with a solid weather-stripped door equipped with an *approved* self-closing device. Combustion air shall be taken directly from the outdoors in accordance with Section 304.6.

(15) Section 304.11 Combustion air ducts is hereby retained in its entirety with the following amendments:

•••

1. Ducts shall be constructed of galvanized steel complying with Chapter 6 of the *International Mechanical Code* or of a material having equivalent corrosion resistance, strength and rigidity.

Exception:

Where the installation of galvanized steel ducts is not practical due to existing finish materials W within dwelling units that are undergoing *alteration* or reconstruction, unobstructed stud and joist spaces shall not be prohibited from conveying *combustion air*, provided that not more than one required fireblock is removed.

. . .

9. All combustion air openings or ducts shall be readily identifiable with an approved label or by other means warning persons that obstruction of such openings or ducts may cause fuel-burning equipment to release combustion products and dangerous levels of carbon monoxide into the building.

(16) Section 305.1 General is hereby retained in its entirety with the following amendments:

. . .

Unlisted appliances approved in accordance with Section 301.3 shall be limited to uses recommended by the manufacturer and shall be installed in accordance with the manufacturer's instructions, the provisions of this code and the requirements determined by the code official.

(17) Section 404.12 Minimum burial depth is hereby retained in its entirety with the following amendments:

404.12 Minimum burial depth. Underground piping systems shall be installed a minimum depth of 12 inches (305 mm) below grade, except as provided for in Section 404.10.1. Underground piping systems for plastic pipe shall be installed a minimum depth of 18 inches below grade, all other pipe material shall be installed a minimum depth of 12 inches below grade.

(18) Section 404.12.1 Individual outdoor appliances, is hereby deleted in its entirey:

404.12.1 Individual outdoor appliances. Individual lines to outdoor lights, grills and other *appliances* shall be installed not less than 8 inches (203 mm) below finished grade., provided that such installation is approved and is installed in locations not susceptible to physical damage.

(19) Section 406.4.1 Test pressure is hereby deleted in its entirety and replaced with the following in lieu thereof:

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), 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.

406.4.1 Test pressure. The test pressure to be used for non-welded pipe shall be 10psi minimum and 60psi for welded pipe.

(20) Section 501.8 Appliances not required to be vented is hereby retained in its entirety with the following amendments:

Electrical ranges.
 Room heaters *listed* for unvented use.
 Other appliances *listed* for unvented use and not provided with flue collars.

. . .

(21) Section 503.5.6.1 Chimney lining is hereby retained in its entirety with the deletion of the listed "Exception" which is stricken in its entirety.

Exception: Where an existing chimney complies with Sections 503.5.6 through 503.5.6.3 and its sizing is in accordance with Section 503.5.5, its continued use shall be allowed where the *appliance* vented by such chimney is replaced by an *appliance* of similar type, input rating and efficiency.

(22) Section 503.6.6 Minimum height is hereby retained in its entirety with the following amendments:

503.6.6 Minimum height. A Type B or L gas *vent* shall terminate not less than 5 feet (1524 mm) in vertical height above the highest connected *appliance draft hood* or *flue collar*. A Type B-W gas *vent* shall terminate not less than 12 feet (3658 mm) in vertical height above the bottom of the wall furnace. All gas *vents* shall terminate a minimum of 22 inches (559 mm) above the surface or grade directly below.

(23) Section 621 Unvented room heaters is hereby deleted in its entirety:

SECTION 621 (IFGC) UNVENTED ROOM HEATERS

621.1 General. Unvented room heaters shall be tested in accordance with ANSI Z21.11.2 and shall be installed in accordance with the conditions of the listing and the manufacturer's installation instructions. Unvented room heaters utilizing fuels other than fuel gas shall be regulated by the *International Mechanical Code*.

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*.

621.3 Input rating. Unvented room heaters shall not have an input rating in excess of 40,000 Btu/h (11.7 kW).

621.4 Prohibited locations. Unvented room heaters shall not be installed within occupancies in Groups A, E and I. The location of unvented room heaters shall also comply with Section 303.3.

621.5 Room or space volume. The aggregate input rating of all unvented appliances installed in a room or space shall not exceed 20 Btu/h per cubic foot (207 W/m3) of volume of such room or space. Where the room or space in which the appliances are installed is directly connected to another room or space by a doorway, archway or other opening of comparable size that cannot be closed, the volume of such adjacent room or space shall be permitted to be included in the calculations.

621.6 Oxygen-depletion safety system. Unvented room heaters shall be equipped with an oxygen depletion sensitive safety shutoff system. The system shall shut off the gas supply to the main and pilot burners when the oxygen in the surrounding atmosphere is depleted to the percent concentration specified by the manufacturer, but not lower than 18 percent. The system shall not incorporate field adjustment means capable of changing the set point at which the system acts to shut off the gas supply to the room heater.

621.7 Unvented decorative room heaters. An unvented decorative room heater shall not be installed in a factory built *fireplace* unless the *fireplace* system has been specifically tested, *listed* and *labeled* for such use in accordance with UL 127.

621.7.1 Ventless firebox enclosures. Ventless firebox enclosures used with unvented decorative room heaters shall be *listed* as complying with ANSI Z21.91.

(24) A new Section 623.3.1 Kitchens with gas cooking is hereby added to read as follows:

623.3.1 Kitchens with gas cooking. Gas cooking *appliances* in residential kitchens shall be supplied with an exhaust system vented to the outside. Ducts serving kitchen exhaust systems shall not terminate in an attic or *crawl space* or areas inside the building and shall

not induce or create a negative pressure in excess of negative 3 Pa or adversely affect gravity-vented appliances.

(25)Section 630.3 Combustion and ventilation air is hereby amended to read as follows:

630.3 Combustion and ventilation air. Where unvented infrared heaters are installed, natural or mechanical means shall provide outdoor ventilation air at a rate of not less than 4 cfm per 1,000 Btu/h (0.38 m3/min/kW) of the aggregate input rating of all such heaters installed in the space. Exhaust openings for removing flue products shall be above the level of the heaters.

Section 4. The City Attorney and the City Clerk are authorized to modify the formatting and to make such other amendments to this Ordinance as necessary to facilitate publication in the Fort Collins Municipal Code; provided, however, that such modifications and amendments shall not change the substance of the Code provisions.

Introduced, considered favorably on first reading, and ordered published this 18th day of December, A.D. 2018, and to be presented for final passage on the 2nd day of January, A.D. 2019.

SEA]

Mayor

ATTEST:

Colduo

Passed and adopted on final reading on the 2nd day of January, A.D. 2019.

ATTEST:

Celduon



NOTICE OF PUBLIC HEARING

NOTICE is hereby given of a public hearing to be held before the City Council of the City of Fort Collins, Colorado, on the 4th day of December, A.D., 2018 at 6:00 p.m., or as soon thereafter as the matter may come on for hearing, in the Council Chambers at the City Hall, 300 LaPorte Avenue, Fort Collins, Colorado for the purpose of considering the adoption of ordinances adopting by reference the 2018 International Building Code, 2018 International Residential Code, 2018 International Energy Conservation Code, 2018 International Mechanical Code, and the 2018 International Fuel Gas Code, 2018 International Existing Building Code, and the 2018 International Pool and Spa Code, together with local amendments, promulgated by the International Code Council.

Not less than one (1) copy of said Codes has been, and now is on file in the Office of the City Clerk of the City of Fort Collins and is available for public inspection.

The purpose of the International Building Code, International Residential Code, International Energy Conservation Code, International Mechanical Code, the International Fuel Gas Code, 2018 International Existing Building Code, and the 2018 International Pool and Spa Code adopted by said ordinance is to provide for protection of public health and safety and general welfare.

The City of Fort Collins will make reasonable accommodations for access to City services, programs and activities and will make special communication arrangements for persons with disabilities. Please call 221-6515 (V/TDD: Dial 711 for Relay Colorado) for assistance.

This notice is given and published by order of the City of Fort Collins, Colorado.

Dated at Fort Collins, Colorado this 18th day of November, A.D. 2018.

Delynn Coldiron City Clerk