

PUBLIC COMMENT VERSION-October 1, 2022

7-28-2021

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34

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 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 *pipng* systems, fuel gas appliances, gaseous hydrogen systems and related accessories.

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

PUBLIC COMMENT VERSION-October 1, 2022

35 LP-gas with an operating pressure of 20 psig (140 kPa gauge) or less, except as provided in
36 Section 402.6. Coverage must extend from the *point of delivery* to the outlet of the *appliance*
37 shutoff valves. *Piping* system requirements must include design, materials, components,
38 fabrication, assembly, installation, testing, inspection, operation and maintenance.
39

40 **101.2.2 Gas appliances.** Requirements for gas appliances and related accessories must include
41 installation, combustion and ventilation air and venting and connections to *piping* systems.
42

43 **101.2.3 Exclusions.** This code does not apply to the following:
44

- 45 1. Portable LP-gas appliances and *equipment* of all types that is not connected to a fixed
46 fuel *piping* system.
47
- 48 2. Installation of farm appliances and *equipment* such as brooders, dehydrators, dryers and
49 irrigation *equipment*.
50
- 51 3. Raw material (feedstock) applications except for *piping* to special atmosphere
52 generators.
53
- 54 4. Oxygen-fuel gas cutting and welding systems.
55
- 56 5. Industrial gas applications using gases such as acetylene and acetylenic compounds,
57 hydrogen, ammonia, carbon monoxide, oxygen and nitrogen.
58
- 59 6. Petroleum refineries, pipeline compressor or pumping stations, loading terminals,
60 compounding plants, refinery tank farms and natural gas processing plants.
61
- 62 7. Integrated chemical plants or portions of such plants where flammable or combustible
63 liquids or gases are produced by, or used in, chemical reactions.
64
- 65 8. LP-gas installations at utility gas plants.
66
- 67 9. Liquefied natural gas (LNG) installations.
68
- 69 10. Fuel gas *piping* in power and atomic energy plants.
70
- 71 11. Proprietary items of *equipment*, apparatus or instruments such as gas-generating sets,
72 compressors and calorimeters.
73
- 74 12. LP-gas *equipment* for vaporization, gas mixing and gas manufacturing.
75
- 76 13. Temporary LP-gas *piping* for buildings under construction or renovation that is not to
77 become part of the permanent *piping* system.
78
- 79 14. Installation of LP-gas systems for railroad switch heating.
80

PUBLIC COMMENT VERSION-October 1, 2022

81 15. Installation of hydrogen gas, LP-gas and compressed natural gas (CNG) systems on
82 vehicles.

83
84 16. Except as provided in Section 401.1.1, gas *piping*, meters, gas pressure regulators and
85 other appurtenances used by the serving gas supplier in the distribution of gas, other
86 than undiluted LP-gas.

87
88 17. Building design and construction, except as specified herein.

89
90 18. *Piping* systems for mixtures of gas and air within the flammable range with an operating
91 pressure greater than 10 psig (69 kPa gauge).

92
93 19. Portable fuel cell appliances that are neither connected to a fixed *piping* system nor
94 interconnected to a power grid.

95
96 **101.2.4 Other fuels.** The requirements for the design, installation, maintenance, *alteration* and
97 inspection of mechanical systems operating with fuels other than fuel gas shall be regulated by
98 the *Dallas Mechanical Code*.

99
100 **101.3 Administrative procedures.** Except as otherwise specified in this code, all provisions of
101 Chapter 52, “Administrative Procedures for the Construction Codes,” of the *Dallas City Code* apply
102 to this code.

103
104 **101.4 Referenced codes and standards.** The codes and standards referenced in this code are
105 considered part of the requirements of this code to the prescribed extent of each such reference only
106 when such codes and standards have been specifically adopted by the city of Dallas. Whenever
107 amendments have been adopted to the referenced codes and standards, each reference to the codes
108 and standards is considered to reference the amendments as well. Any reference made to NFPA 70
109 or the *ICC Electrical Code* means the *Dallas Electrical Code*, as amended. References made to the
110 *International Mechanical Code*, the *International Plumbing Code*, the *International Fire Code*, the
111 *International Energy Conservation Code*, the *International Building Code*, the *International*
112 *Existing Building Code* and the *International Residential Code* respectively mean the *Dallas*
113 *Mechanical Code*, the *Dallas Plumbing Code*, the *Dallas Fire Code*, the *Dallas Energy*
114 *Conservation Code*, the *Dallas Building Code*, the *Dallas Existing Building Code* and the *Dallas*
115 *One- and Two-Family Dwelling Code*, as amended. Where differences occur between provisions
116 of this code and the referenced codes and standards, the provisions of this code apply.

117
118 **Exception:** Where enforcement of a code provision would violate the conditions of the listing
119 of the equipment or appliance, the conditions of the listing and the manufacturer’s installation
120 instructions apply.

121
122 **101.5 Unsafe installations.** An installation that is unsafe, constitutes a fire or health hazard, or is
123 otherwise dangerous to human life, as regulated by this code, is hereby declared an unsafe
124 installation. Use of an installation regulated by this code constituting a hazard to health, safety or
125 welfare by reason of inadequate maintenance, dilapidation, fire hazard, disaster, damage or

PUBLIC COMMENT VERSION-October 1, 2022

126 abandonment is hereby declared to be a public nuisance and must be abated by repair, rehabilitation,
127 demolition or removal.”

128
129 2. Subsection [M] 306.5, “Equipment and Appliances on Roofs or Elevated
130 Structures,” of Section 306 (IFGC), “Access and Service Space,” of Chapter 3, “General
131 Regulations,” of the 2021 International Fuel Gas Code is amended to read as follows:

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

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

- 143 1. The side railing shall extend above the parapet or roof edge not less than 30 inches (762
144 mm).
- 145 2. Ladders shall have rung spacing not to exceed 14 inches (356 mm) on center. The upper-
146 most rung shall be a maximum of 24 inches (610 mm) below the upper edge of the roof
147 hatch, roof or parapet, as applicable.
- 148 3. Ladders shall have a toe spacing not less than 6 inches (152 mm) deep.
- 149 4. There shall be a minimum of 18 inches (457 mm) between rails.
- 150 5. Rungs shall have a minimum 0.75-inch (19 mm) diameter and be capable of withstanding a
151 300-pound (136.1 kg) load.
- 152 6. Ladders over 30 feet (9144 mm) in height shall be provided with offset sections and landings
153 capable of withstanding 100 pounds per square foot (488.2 kg/m²). Landing dimensions
154 shall be not less than 18 inches (457 mm) and not less than the width of the ladder served.
155 A guard rail shall be provided on all open sides of the landing.
- 156 7. Climbing clearance. The distance from the centerline of the rungs to the nearest permanent
157 object on the climbing side of the ladder shall be a minimum of 30 inches (762 mm)
158 measured perpendicular to the rungs. This distance shall be maintained from the point of
159 ladder access to the bottom of the roof hatch. A minimum clear width of 15 inches (381

PUBLIC COMMENT VERSION-October 1, 2022

160 mm) shall be provided on both sides of the ladder measured from the midpoint of and
161 parallel with the rungs except where cages or wells are installed.

162 8. Landing required. The ladder shall be provided with a clear and unobstructed bottom
163 landing area having a minimum dimension of 30 inches (762 mm) by 30 inches (762 mm)
164 centered in front of the ladder.

165 9. Ladders shall be protected against corrosion by *approved* means.

166 10. Access to ladders shall be provided at all times.

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

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

170 **[M] 306.5.1 Sloped roofs.** Where appliances, *equipment*, fans or other components that require
171 service are installed on a roof having a slope 3 units vertical in 12 units horizontal (25-percent
172 slope) or greater and having an edge more than 30 inches (762 mm) above grade at such edge,
173 a catwalk at least 16 inches in width with substantial cleats spaced not more than 16 inches apart
174 shall be provided from the roof access to a level platform at the appliance. The level platform
175 shall be provided on each side of the *appliance* or *equipment* to which *access* is required for
176 service, repair or maintenance. The platform shall be not less than 30 inches (762 mm) in any
177 dimension and shall be provided with guards. The guards shall extend not less than 42 inches
178 (1067 mm) above the platform, shall be constructed so as to prevent the passage of a 21-inch-
179 diameter (533 mm) sphere and shall comply with the loading requirements for guards specified
180 in the *Dallas [International] Building Code*. *Access* shall not require walking on roofs having a
181 slope greater than 4 units vertical in 12 units horizontal (33-percent slope). Where *access*
182 involves obstructions greater than 30 inches (762 mm) in height, such obstructions shall be
183 provided with ladders installed in accordance with Section 306.5 or stairs installed in
184 accordance with the requirements specified in the *Dallas [International] Building Code* in the
185 path of travel to and from appliances, fans or *equipment* requiring service.

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

188 3. Subsection 401.5, “Identification,” of Section 401 (IFGC), “General,” of Chapter 4,

189 “Gas Piping Installations,” of the 2021 International Fuel Gas Code is amended to read as follows:

190 **“401.5 Identification.** For other than steel pipe and CSST, exposed *pipng* shall be identified by a
191 yellow label marked “Gas” in black letters. The marking shall be spaced at intervals not exceeding
192 5 feet (1524 mm). The marking shall not be required on *pipng* located in the same room as the
193 *appliance* served. CSST shall be identified as required by ANSI LC 1/CSA 6.26.
194

PUBLIC COMMENT VERSION-October 1, 2022

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

198
199 “WARNING
200 ½ TO 5 psi gas pressure
201 Do Not Remove.”

202
203 4. Subsection 404.12, “Minimum Burial Depth,” of Section 404 (IFGC), “Piping
204 System Installation,” of Chapter 4, “Gas Piping Installations,” of the 2021 International Fuel Gas
205 Code is amended to read as follows:

206 **“404.12 Minimum burial depth.** Underground *piping* systems shall be installed a minimum depth
207 of 18 [12] inches (458 [305] mm), measured from the top of the pipe to the existing [below] grade[;
208 except as provided for in Section 404.12.1].

209 ~~**404.12.1 Individual outside appliances.** Individual lines to outside lights, grills or other~~
210 ~~*appliances* shall be installed a minimum of 8 inches (203 mm) below finished grade, provided~~
211 ~~that such installation is *approved* and is installed in locations not susceptible to physical~~
212 ~~damage.]”~~

213
214 5. Subsection 406.4, “Test Pressure Measurement,” of Section 406 (IFGS),
215 “Inspection, Testing and Purging,” of Chapter 4, “Gas Piping Installations,” of the 2021
216 International Fuel Gas Code is amended to read as follows:

217 **“406.4 Test pressure measurement.** Test pressure shall be measured with a manometer or with a
218 pressure-measuring device designed and calibrated to read, record, or indicate a pressure loss
219 caused by leakage during the pressure test period. The source of pressure shall be isolated before
220 the pressure tests are made. Mechanical gauges used to measure test pressures shall have a range
221 such that the highest end of the scale is not greater than five times the test pressure. Spring type
222 gauges do not meet the requirement of a calibrated gauge.

223 **406.4.1 Test pressure.** The test pressure to be used shall be no less than ~~[1 ½ times the~~
224 ~~proposed maximum working pressure, but not less than] 3 psig (20 kPa gauge). For tests~~
225 ~~requiring a pressure of 3 psig, diaphragm gauges must utilize a dial with a minimum diameter~~
226 ~~of 3 ½ inches, a set hand, 1/10 pound increments and pressure range not to exceed 6 psi for tests~~
227 ~~requiring a pressure of 3 psig. For tests requiring a pressure of 10 psig, diaphragm gauges must~~
228 ~~utilize a dial with a minimum diameter of 3 ½ inches, a set hand, a minimum of 2/10 pound~~
229 ~~increments and a pressure range not to exceed 20 psi. For welded piping, and for piping carrying~~
230 ~~gas at pressures in excess of 14 inches water column pressure (3.48 kPa) (1/2 psi) and less than~~
231 ~~200 inches of water column pressure (52.2 kPa) (7.5 psi), the test pressure must not be less than~~
232 10 pounds per square inch (69.6 kPa). For piping carrying gas at a pressure that exceeds 200

PUBLIC COMMENT VERSION-October 1, 2022

233 inches of water column (52.2 kPa) (7.5 psi), the test pressure must be not less than one and one-
234 half times the proposed maximum working pressure

235
236 Diaphragm gauges used for testing must display a current calibration and be in good
237 working condition. The appropriate test must be applied to the diaphragm gauge used for
238 testing. [~~irrespective of design pressure. Where the test pressure exceeds 125 psig (862 kPa~~
239 ~~gauge), the test pressure shall not exceed a value that produces a hoop stress in the piping greater~~
240 ~~than 50 percent of the specified minimum yield strength of the pipe.]~~

241 **406.4.2 Test duration.** Test duration shall be held for a length of time satisfactory to the
242 building official, but in no case for less than 15 minutes. For welded piping, and for piping
243 carrying gas at pressures in excess of 14 inches water column pressure (3.48 kPa), the test
244 duration must be held for a length of time satisfactory to the building official, but in no case for
245 less than 30 minutes. [~~not less than ½ hour for each 500 cubic feet (14 m³) of pipe volume or~~
246 ~~fraction thereof. When testing a system having a volume less than 10 cubic feet (0.28 m³) or a~~
247 ~~system in a single-family dwelling, the test duration shall be not less than 10 minutes. The~~
248 ~~duration of the test shall not be required to exceed 24 hours.]~~

249
250 6. Subsection 409.1, “General,” of Section 409 (IFGC), “Shutoff Valves,” of Chapter
251 4, “Gas Piping Installations,” of the 2021 International Fuel Gas Code is amended by adding a new
252 paragraph 409.1.4, “Valves in CSST Installations,” to read as follows:

253 **“409.1.4 Valves in CSST installations.** Shutoff valves installed with corrugated stainless steel
254 (CSST) piping systems shall be supported with an *approved* termination fitting, or equivalent
255 support, suitable for the size of the valves, of adequate strength and quality, and located at intervals
256 so as to prevent or damp out excessive vibration but in no case greater than 12 inches from the
257 center of the valve. Supports shall be installed so as not to interfere with the free expansion and
258 contraction of the system’s piping, fittings, and valves between anchors. All valves and supports
259 shall be designed and installed so they will not be disengaged by movement of the supporting
260 piping.

261
262 7. Subsection 621.2, “Prohibited Use,” of Section 621 (IFGC), “Unvented Room Heaters,”
263 of Chapter 6, “Specific Appliances,” of the 2021 International Fuel Gas Code is amended to read
264 as follows:

265 **“621.2 Prohibited use.** One or more unvented room heaters shall not be used as the sole source of
266 comfort heating in a *dwelling unit*.

267
268 **Exception:** Existing approved unvented heaters may continue to be used in dwelling units, in
269 accordance with the code provisions in effect when installed, when approved by the building
270 official, unless an unsafe condition is determined to exist as described in Section 101.5.”

PUBLIC COMMENT VERSION-October 1, 2022

271
272

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

274
275 9. All chapters of the 2021 International Fuel Gas Code adopted by this ordinance are
276 subchapters of Chapter 60 of the Dallas City Code, as amended.

277
278 10. All references in the 2021 International Fuel Gas Code to the fire code, building
279 code, plumbing code, mechanical code, electrical code, residential code, existing building code,
280 and energy conservation code refer, respectively, to Chapters 16, 53, 54, 55, 56, 57, 58, and 59 of
281 the Dallas City Code.

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

290 SECTION 3. That Chapter 60 of the Dallas City Code, as amended, will remain in full force
291 and effect, save and except as amended by this ordinance. If any provision contained in Chapters
292 16, 52, 53, 54, 55, 56, 57, 58, or 59 relating to fuel gas work in the city is in conflict with any
293 provision of Chapter 60, as adopted by this ordinance, the provisions of Chapter 60 will prevail,
294 except that any existing structure, system, development project, or registration that is not required

PUBLIC COMMENT VERSION-October 1, 2022

295 to come into compliance with a requirement of this ordinance will be governed by the requirement
296 as it existed in the former law last applicable to the structure, system, development project, or
297 registration, and all former laws will continue in effect for this purpose.

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

300 SECTION 5. That this ordinance will take effect on _____, 201_, and it is
301 accordingly so ordained.

302

303

304 APPROVED AS TO FORM:

305

306

307

308

309 By _____
310 Assistant City Attorney

311

312

313 Passed _____