

## **TOWN OF FLOWER MOUND, TEXAS**

### **ORDINANCE NO. 19-22**

**AN ORDINANCE OF THE TOWN OF FLOWER MOUND, TEXAS, AMENDING CHAPTER 14, "BUILDINGS AND BUILDING REGULATIONS," ARTICLE III, OF THE CODE OF ORDINANCES OF THE TOWN OF FLOWER MOUND, TO PROVIDE FOR ADOPTION OF THE *INTERNATIONAL PLUMBING CODE*, 2021 EDITION, AND THE *INTERNATIONAL FUEL GAS CODE*, 2021 EDITION AND LOCAL AMENDMENTS THERETO; REPEALING ALL CONFLICTING ORDINANCES; PROVIDING A SEVERABILITY CLAUSE; PROVIDING A PENALTY; PROVIDING FOR PUBLICATION; AND PROVIDING AN EFFECTIVE DATE.**

**WHEREAS**, the International Code Council (ICC) has developed a set of comprehensive and coordinated national model construction codes (known as the "International Codes"); and,

**WHEREAS**, the *International Plumbing Code* and *International Fuel Gas Code* have been prepared by the ICC and in addition to review by the North Central Texas Council of Governments (NCTCOG), have been reviewed by Town staff; and,

**WHEREAS**, the current plumbing code in the Town is the 2018 edition of the *International Plumbing Code* and the current fuel gas code in the Town is the 2018 edition of the *International Fuel Gas Code*, and the Town's plumbing code and fuel gas code should be updated to the most current published codes available; and,

**WHEREAS**, the 2021 editions of the *International Plumbing Code* and *International Fuel Gas Code* are the most current published codes available that address the general design and construction aspects of all plumbing in the Town, except for one- and two-family dwellings and townhouses (which are covered by the International Residential Code); and,

**WHEREAS**, the Town Council of the Town of Flower Mound has determined that it is in the best interest of the citizens of the Town of Flower Mound to update and adopt the 2021 editions of the *International Plumbing Code* and *International Fuel Gas Code* and has determined that this will promote the health, safety, and general welfare of the citizens of the Town of Flower Mound and the general public; and,

**WHEREAS**, the Town Council of the Town of Flower Mound further desires to adopt certain local amendments to such Code reflecting the unique needs of the Town of Flower Mound;

**NOW, THEREFORE, BE IT ORDAINED (RESOLVED) BY THE TOWN COUNCIL OF THE TOWN OF FLOWER MOUND, TEXAS, THAT:**

### **SECTION 1**

All of the above premises are found to be true and correct factual and legislative determinations of the Town of Flower Mound and are hereby approved and incorporated into the body of this Ordinance as if copied in their entirety.

## **SECTION 2**

From and after the effective date of this Ordinance, Section 14-71 of the Code of Ordinances of the Town of Flower Mound, entitled "International Plumbing Code and International Fuel Gas Code Adopted," is hereby deleted and is replaced with the following:

**"Sec. 14-71. International Plumbing Code and International Fuel Gas Code Adopted.**

The *International Plumbing Code*, 2021 edition, and the *International Fuel Gas Code*, 2021 edition, a copy of each of which is on file in the office of the town secretary, are hereby adopted and designated as the plumbing codes of the town, the same as though the provisions of the *International Plumbing Code*, 2021 edition, and the *International Fuel Gas Code*, 2021 edition, were copied at length in this section, subject to the deletions, amendments, and additions provided in section 14-72. The term "plumbing code" refers to both codes as one combined code."

## **SECTION 3**

From and after the effective date of this Ordinance, Section 14-72 of the Code of Ordinances of the Town of Flower Mound, entitled "Local Amendments to International Plumbing Code and International Fuel Gas Code," is hereby deleted and is replaced with the following:

**"Sec. 14-72. Local Amendments to International Plumbing Code and International Fuel Gas Code.**

The *International Plumbing Code*, 2021 edition, and the *International Fuel Gas Code*, 2021 edition, are hereby amended by amending only the enumerated sections and provisions, as follows, and all sections and provisions not expressly amended or deleted shall remain in full force and effect:

- (a) The Table of Contents under Chapter 7, Sanitary drainage, 713 of the *International Plumbing Code*, 2021 edition, is hereby amended to read as follows:

713 Engineered Drainage Design .....7-12

- (b) Section 101.1 of the *International Plumbing Code*, 2021 edition, is hereby amended to read as follows:

**Section 101.1. Title.** These regulations, combined with the regulations located in the *International Fuel Gas Code*, shall be known as the plumbing code of the town, hereinafter referred to as “this code.”

- (c) Section 101.5 of the *International Plumbing Code*, 2021 edition, is hereby added to read as follows:

**Section 101.5. License and registration required.** It shall be unlawful for any person, firm, or corporation to make any installation, alteration, repair, replacement, or remodel of any plumbing system regulated by this code without having registered a valid Texas Master Plumber’s License, or other applicable license, with the town. Said registration shall become null and void one year from the date of registration with the Town. If appropriate, a fee for registration shall be assessed in accordance with the provisions of Appendix A of the Code of Ordinances of the Town of Flower Mound, Texas.

**Exception:** Any residential property owner who, at his legal residence, desires to personally make or perform any installation, alteration, repair, replacement, or remodel of any plumbing system regulated by this code shall be exempt from paying a registration fee. For this section, *legal residence* shall be defined as property for which a property owner shows proof of a homestead exemption.

Any contractor registration regulated by this code may be placed on hold or suspended by the building official, preventing any additional permits from being issued, if it is determined by the building official that corrective action is needed for compliance with the requirements of section 18-32 of the Code of Ordinances of the Town of Flower Mound. If any contractor registration regulated by this code is suspended, the procedures outlined in Chapter 18, Article II, of the Code of Ordinances of the Town of Flower Mound, shall apply. Any registration placed on hold more than three times in a calendar year may be subject to suspension by the building official.

The supervising master or journeyman plumber shall be on the job site at all times while plumbing work is being performed. The ratio of helpers, apprentice plumbers, or otherwise unlicensed plumbers shall not exceed three (3) unlicensed plumbers to one (1) supervising master or journeyman plumber.

- (d) Section 102.8 of the *International Plumbing Code*, 2021 edition, is hereby amended to read as follows:

**Section 102.8. Referenced codes and standards.** The codes and standards referenced in this code shall be those that are listed in chapter 15, 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. Where differences occur between provisions of this code and the referenced standards, the provisions of this code shall be the minimum requirements. Whenever amendments have been adopted to the referenced codes and standards, each reference to said code and standard shall be considered to reference the adopted amendments. Any reference to NFPA 70 shall mean the National Electrical Code as adopted.

- (e) Section 106.1 of the *International Plumbing Code*, 2021 edition, is hereby amended by adding a paragraph to read as follows:

**Section 106.1. Where required.** {Existing paragraph remains unchanged}. All permit applications for work required to be permitted by this code shall be submitted by a plumber licensed by the State of Texas and registered with the Town.

Exceptions:

1. An irrigator licensed by the Texas Commission on Environmental Quality and registered with the Town may submit permit applications for lawn irrigation systems.
  2. A registered general contractor may submit a building permit application as required by the *International Building Code* that includes plumbing work, as long as a licensed and registered plumber is named on said permit.
- (f) Section 106.5.3 of the *International Plumbing Code*, 2021 edition, is hereby amended to read as follows:

**Section 106.5.3. Expiration.** Every permit issued shall become invalid unless the work on the site authorized by such permit is commenced within 180 days after its issuance or if the work authorized on the site by such permit is suspended or abandoned at any time after the work has commenced for a period of 180 days. For this section, *suspended* or *abandoned* will be defined as an elapsed time between any two approved required inspections. Once a permit becomes invalid and before such building or work can be recommenced, a new permit shall first be obtained to do so, and the fee therefor shall be one-half the amount required for a new permit for such building or work, provided no changes have been made or will be made in the original plans and specifications for such building or work, and provided further that such suspension or

abandonment has not exceeded one year. In order to renew action on a permit after expiration of more than one year, the permittee shall submit a new application and pay a new full permit fee.

**Exception:** Water heater and boiler replacement permits must receive a final inspection within 10 days of installation.

- (g) Section 114 of the *International Plumbing Code*, 2021 edition, is hereby amended by deleting the entire section and replacing it with the following provision to read as follows:

**Section 114. Means of appeals.** Any person shall have the right to appeal a decision of the building official to the board of appeals established by ordinance. The board shall be governed by the enabling ordinance.

- (h) Section 305.1 of the *International Plumbing Code*, 2021 edition, is hereby amended to read as follows:

**Section 305.1. Protection against contact.** Metallic piping, except for cast iron, ductile iron and galvanized steel, shall not be placed in direct contact with steel framing members, concrete or cinder walls and floors or other masonry. Metallic piping shall not be placed in direct contact with corrosive soil. Where sheathing is used to prevent direct contact, the sheathing shall have a thickness of not less than 0.008 inch (8 mil) (0.203 mm) and the sheathing shall be made of approved material. Where sheathing protects piping that penetrates concrete or masonry walls or floors, the sheathing shall be installed in a manner that allows movement of the piping within the sheathing.

- (i) Section 305.4.1 of the *International Plumbing Code*, 2021 edition, is hereby amended to read as follows:

**Section 305.4.1. Sewer depth.** Building sewers shall be a minimum of 12 inches (304 mm) below grade.

- (j) Section 305.7 of the *International Plumbing Code*, 2021 edition, is hereby amended to read as follows:

**Section 305.7. Protection of components of plumbing systems.** Components of a plumbing system installed within 3 feet along alleyways, driveways, parking garages, or other locations in a manner in which they could be exposed to damage shall be recessed into the wall or otherwise protected in an approved manner.

- (k) Section 306.2.4 of the *International Plumbing Code*, 2021 edition, is hereby added to read as follows:

**Section 306.2.4. Plastic sewer and DWV piping installation.** Plastic sewer and DWV piping installed underground shall be installed in accordance with the manufacturer's installation instructions. Trench width shall be controlled to not exceed the outside the pipe diameter plus 16 inches or in a trench which has a controlled width equal to the nominal diameter of the diameter of the piping multiplied by 1.25 plus 12 inches. The piping shall be bedded in 4 inches of granular fill and then backfilled compacting the side fill in 6-inch layers on each side of the piping. The compaction shall be to minimum of 85 percent standard proctor density and extend to a minimum of 6 inches above the top of the pipe.

- (l) Sections 312.10 of the *International Plumbing Code*, 2021 edition, is hereby deleted and replaced to read as follows:

**Section 312.10. Cross-Connection Control Program**

**A. General.** No water service connection shall be made to any establishment where a potential or actual contamination hazard exists unless the water supply is protected in accordance with the Texas Commission on Environmental Quality's Rules and Regulations for Public Water Systems ("TCEQ Rules") and this code. The water purveyor shall discontinue water service if a required backflow prevention assembly is not installed, maintained, and tested in accordance with the TCEQ Rules and this code.

**B. Backflow prevention assembly installation, testing, and maintenance.**

- (1) All backflow prevention assemblies shall be tested upon installation by a registered backflow prevention assembly tester and certified to be operating within specifications. Backflow prevention assemblies which are installed to provide protection against health hazards shall be registered with the town and shall be tested and certified to be operating within specifications at least annually by a registered backflow prevention assembly tester. Such registration shall be effective annually and subject to the fee specified in Appendix A of the Code of Ordinances of the Town of Flower Mound.
- (2) All backflow prevention assemblies shall be installed and tested in accordance with the manufacturer's instructions, the American Water Works Association's Recommended

Practice for Backflow Prevention and Cross-Connection Control (Manual M14), or The University of Southern California Manual of Cross-Connection Control.

- (3) Assemblies shall be repaired, overhauled, or replaced at the expense of the customer whenever said assemblies are found to be defective. Original forms of such test, repairs, and overhaul shall be kept and submitted to the town within five (5) working days of the test, repair, or overhaul of each backflow prevention assembly.
- (4) No backflow prevention assembly or device shall be removed from use, relocated, or other assembly or device substituted without the approval of the town. Whenever the existing assembly or device is moved from the present location or cannot be repaired, the backflow assembly or device shall be replaced with a backflow prevention assembly or device that complies with this section, the American Water Works Association's Recommended Practice for Backflow Prevention and Cross-Connection Control (Manual M14), current edition, The University of Southern California Manual of Cross-Connection Control, current edition, or the current plumbing code, whichever control is more stringent.
- (5) Test gauges used for backflow prevention assembly testing shall be calibrated at least annually in accordance with the American Water Works Association's Recommended Practice for Backflow Prevention and Cross-Connection Control (Manual M14), current edition, or The University of Southern California Manual of Cross-Connection Control, current edition. The original calibration form must be submitted to the town within five (5) working days after calibration.
- (6) A recognized backflow prevention assembly tester must hold a current endorsement from the Texas Commission on Environmental Quality ("TCEQ" or "Commission").
- (7) Annual inspections shall be made of all backflow prevention assemblies and air gaps to determine whether they are operable. In the absence of local provisions, the owner is responsible to ensure that testing is performed.
- (8) Reduced pressure principle backflow preventer assemblies, double check-valve assemblies, pressure vacuum breaker

assemblies, reduced pressure detector fire protection backflow prevention assemblies, double check detector fire protection backflow prevention assemblies, hose connection backflow preventers, and spill-proof vacuum breakers shall be tested at the time of installation, immediately after repairs or relocation, and at least annually. The testing procedure shall be performed in accordance with applicable local provisions. In the absence of local provisions, the owner is responsible to ensure that testing is done in accordance with one of the following standards:

ASSE 5013; ASSE 5015; ASSE 5020; ASSE 5047; ASSE 5048; ASSE 5052; ASSE 5056; CSA B64.10; or, CSA B64.10.1.

**C. Customer service inspections.**

- (1) A customer service inspection shall be completed prior to providing continuous water service to all new construction, on any existing service when the water purveyor has reason to believe that cross-connections or other contaminant hazards exist, or after any material improvement, correction, or addition to the private water distribution facilities.
- (2) Only individuals with the following credentials shall be recognized as capable of conducting a customer service inspection:
  - (a) Plumbing Inspectors and Water Supply Protection Specialists that have been licensed by the Texas State Board of Plumbing Examiners.
  - (b) Certified Waterworks Operators and members of other water-related professional groups who have completed a training course, passed an examination administered by the Commission or its designated agent, and hold a current endorsement issued by the Commission.
- (3) The Customer Service Inspection must certify that:
  - (a) No direct connection between the public drinking water supply and a potential source of contamination exists.



- (b) Potential sources of contamination have been isolated from the public water system by a properly installed air gap or an appropriate backflow prevention assembly.
- (c) No cross-connection between the public water supply and a private water source exists. (Where an actual properly installed air gap is not maintained between the public water supply and a private water supply, an approved reduced pressure-zone backflow prevention assembly is properly installed and a service agreement exists for annual inspection and testing by a recognized backflow prevention assembly tester.)
- (d) No connection which allows water to be returned to the public drinking water supply exists.
- (e) No pipe or pipe fitting which contains more than 8% lead has been used for the installation or repair of plumbing at any connection that provides water for human use.
- (f) No solder or flux which contains more than 0.2% lead has been used for the installation or repair of plumbing at any connection that provides water for human use. (A minimum of one lead test shall be performed for each inspection.)

**D. Certified backflow prevention assembly tester responsibilities.**

- (1) No certified backflow assembly tester shall operate within the town without first registering with the town.
- (2) A registration shall remain in effect provided:
  - (a) The tester maintains certification by the TCEQ; and
  - (b) Registration is not revoked by the town.
- (3) A tester shall annually renew his/her registration with the town. If a certification remains expired for a period of one year, the tester shall reestablish registration eligibility.
- (4) Each applicant for registration shall:

- (a) Provide proof of current certification in the State of Texas.
  - (b) Provide evidence to establish that the applicant has the necessary tools and equipment to properly test backflow prevention assemblies.
  - (c) Submit a list identifying all test gauges by the name of the manufacturer, model number, and the serial numbers of each gauge that will be used in testing backflow assemblies.
  - (d) Comply with and conform to all requirements of Chapter 18, Article II, Section 18-31, of the Code of Ordinances of the Town of Flower Mound.
- (5) A registered backflow prevention assembly tester shall:
  - (a) Annually have each recorded test kit tested for accuracy and calibrated according to TCEQ regulations, and submit a copy of the test results at the time of registration or renewal.
  - (b) Perform competent and accurate certifications of each backflow prevention assembly tested and shall submit complete reports thereof to the town.
  - (c) List registered serial numbers of test gauges on tests and maintenance reports prior to submitting them to the town.
  - (d) Not change the design or operation characteristics of a backflow prevention assembly.
  - (e) Submit a copy of test results to the town within 15 days of testing.
  - (f) Maintain testing and repair records for a minimum of three years.
- (6) After notice, the town may revoke a registration if the town determines that the tester:
  - (a) Has made false, incomplete, or inaccurate assembly testing reports;

- (b) Has used inaccurate gauges;
  - (c) Has used improper testing procedures;
  - (d) Is not in compliance with safety regulations;
  - (e) Has failed to submit the required information on his/her test kits or failed to calibrate gauges annually as required by subsection (5) above;
  - (f) Has violated any other provision of this code; or
  - (g) Is not in compliance with the requirements of Chapter 18, Article II, Section 18-32 of the Code of Ordinances of the Town of Flower Mound.
- (m) Section 314.2.1 of the International Plumbing Code, 2021 edition, is hereby amended to read as follows:
- Section 314.2.1. Condensate disposal.** Condensate from all cooling coils and evaporators shall be conveyed from the drain pan outlet to an approved place of disposal. ... *{text unchanged}* ... Condensate shall not discharge into a street, alley, sidewalk, rooftop, or other areas so as to cause a nuisance.
- (n) Section 401.1 of the *International Plumbing Code*, 2021 edition, is hereby amended, in part, by adding a second paragraph to read as follows:
- Section 401.1. Scope.** *{Existing paragraph remains unchanged.}* The provisions of this chapter are meant to work in coordination with the provisions of the building code. Should any conflicts arise between the two chapters, the code official shall determine which provision applies.
- (o) Section 403.1 of the *International Plumbing Code*, 2021 edition, is hereby amended, in part, by adding a second paragraph to read as follows:
- Section 403.1. Minimum number of fixtures.** *{Existing paragraph remains unchanged.}*
- In other than E occupancies, the minimum number of fixtures in Table 403.1 may be lowered, if requested in writing by the applicant, stating reasons for a reduced number, and approved by the building official.
- (p) Section 403.2 of the *International Plumbing Code*, 2021 edition, is hereby amended by changing Exception 2. to read as follows:

**Section 403.2 Separate facilities.**

2. Separate facilities shall not be required in structures or tenant spaces with a total occupant load, including both employees and customers, of 25 or less.

- (q) Section 409.2 of the International Plumbing Code, 2021 edition, is hereby amended to read as follows:

**Section 409.2. Water connection.** The water supply to a commercial dishwashing machine shall be protected against backflow by an air gap or backflow preventer in accordance with Section 608. *{Remaining text unchanged.}*

- (r) Section 410.2 of the International Plumbing Code, 2021 edition, is hereby amended by adding a paragraph to read as follows:

**Section 410.2. Small occupancies.** *{Existing paragraph remains unchanged.}* Drinking fountains are not required in M and B Occupancies with an occupant load of 100 or less, and for dining and/or drinking establishments.

- (s) Section 413.4 of the *International Plumbing Code*, 2021 edition, is hereby amended to read as follows:

**Section 413.4. Required location for floor drains.** Floor drains shall be installed in the following areas.

1. In public coin-operated laundries and in the central washing facilities of multiple family dwellings, the rooms containing automatic clothes washers shall be provided with floor drains located to readily drain the entire floor area. Such drains shall have a minimum outlet of not less than 3 inches (76mm) in diameter.
2. Commercial kitchens. In lieu of floor drains in commercial kitchens, the code official may accept floor sinks.
3. Public restrooms.

- (t) Section 424.3 of the International Plumbing Code, 2021 edition, is hereby added to read as follows:

**Section 424.3. Surrounding material.** Wall and floor space to a point 2 feet (610 mm) in front of a urinal lip and 4 feet (1219 mm) above the floor

and at least 2 feet (610 mm) to each side of the urinal shall be waterproofed with a smooth, readily cleanable, hard, nonabsorbent material.

- (u) Section 502.6 of the International Plumbing Code, 2021 edition, is hereby added to read as follows:

**Section 502.6. 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 (2,438 mm) above the ground or floor level, it shall be made accessible by a stairway or permanent ladder fastened to the building.

**Exception:** A max 10 gallon water heater (or larger with approval) that is installed not more than ten (10) feet (3,048 mm) above the ground or floor level, may be accessible using a portable ladder.

Whenever the mezzanine or platform is not adequately lighted or access to a receptacle outlet is not obtainable from the main level, lighting and a receptacle outlet shall be provided.

- (v) Section 504.6 of the International Plumbing Code, 2021 edition, is hereby amended to read as follows:

**Section 504.6. Requirements for discharge piping.** The discharge piping serving a pressure relief valve, temperature relief valve, or combination thereof shall:

1. Not be directly connected to the drainage system.
2. Discharge through an air gap.
3. Not be smaller than the diameter of the outlet of the valve served and shall discharge full size to the air gap.
4. Serve a single relief device and shall not connect to piping serving any other relief device or equipment.

**Exception:** Multiple relief devices may be installed to a single T & P discharge piping system when approved by the administrative authority and permitted by the manufacturer's installation instructions and installed with those instructions.

5. Discharge to an indirect waste receptor or to the outdoors.

6. Discharge in a manner that does not cause personal injury or structural damage.
  7. Discharge to a termination point that is readily observable by the building occupants.
  8. Not be trapped.
  9. Be installed so as to flow by gravity.
  10. Not terminate less than 6 inches or more than 24 inches (152 mm) above grade nor more than 6 inches above the waste receptor.
  11. Not have a threaded connection at the end of such piping.
  12. Not have valves or tee fittings.
  13. Be constructed of those materials listed in Section 605.4 or materials tested, rated, and approved for such use in accordance with ASME A112.4.1.
  14. Be one nominal size larger than the size of the relief valve outlet, where the relief valve discharge piping is installed with insert fittings. The outlet end of such tubing shall be fastened in place.
- (w) Section 606.1 of the *International Plumbing Code*, 2021 edition, is hereby amended, in part, as follows:
- Section 606.1. Location of full-open valves.** Delete items 4 and 5 from the list.
- (x) Section 606.2 of the *International Plumbing Code*, 2021 edition, is hereby amended to read as follows:
- Section 606.2. Location of shutoff valves.** Shutoff valves shall be installed in the following locations:
1. On the fixture supply to each plumbing fixture other than bathtubs and showers in one- and two-family residential occupancies, and other than in individual sleeping units that are provided with unit shutoff valves in hotels, motels, boarding houses, and similar occupancies.

2. On the water supply pipe to each appliance or mechanical equipment.

- (y) Section 608.1 of the International Plumbing Code, 2021 edition, is hereby amended to read as follows:

**Section 608.1. General.** A potable water supply system shall be designed, installed, and maintained in such a manner so as to prevent contamination from non-potable liquids, solids, or gases being introduced into the potable water supply through cross-connections or any other piping connections to the system. Backflow preventer applications shall conform to applicable local regulations, table 608.1, and as specifically stated in sections 608.2 through 608.17.10.

- (z) Section 608.17.1 of the International Plumbing Code, 2021 edition, is hereby amended to read as follows:

**Section 608.17.1. Beverage dispensers.** The water supply connection to beverage dispensers shall be protected against backflow by a reduced pressure principle backflow preventer (RPZ) or an air gap.

- (aa) Section 608.17.4 of the International Plumbing Code, 2021 edition, is hereby amended by adding a second paragraph to read as follows:

**Section 608.17.4. Connection to automatic fire sprinkler system and standpipe system.** *{First paragraph and exceptions remain unchanged}...*

The required backflow prevention device shall be installed in an approved; freeze protected, above ground structure, and should be monitored.

- (bb) Section 608.17.5 of the International Plumbing Code, 2021 edition, is hereby amended to add a second paragraph to read as follows:

**Section 608.17.5. Connections to lawn irrigation systems.** *{First paragraph unchanged}...*

All lawn sprinkling systems shall be equipped with a temperature sensing device that stops the flow of water through the lawn sprinkling system when the ambient temperature is thirty-eight degrees Fahrenheit (38° F) or less and a device that stops the flow of water through the lawn sprinkling system when one-quarter inch (1/4") or more of rain falls. Further, pursuant to Section 551.006 of the Texas Local Government Code, all lawn sprinkling systems shall comply with Section 1903.053 of the Texas Occupations Code, and any rules adopted by the Texas Commission on Environmental Quality under that section.

- (cc) Section 608.18 of the International Plumbing Code, 2021 edition, is hereby amended to read as follows:

**Section 608.18. Protection of individual water supplies.** An individual water supply shall be located and constructed so as to be safeguarded against contamination in accordance with applicable local regulations. In the absence of other local regulations, installation shall be in accordance with sections 608.18.1 through 608.18.8.

- (dd) Section 610.1 of the International Plumbing Code, 2021 edition, is hereby amended by adding an exception to read as follows:

**Section 610.1. General.**

**Exception:** With prior approval, the code official may waive this requirement when deemed unnecessary.

- (ee) Section 705.10.2 of the International Plumbing Code, 2021 edition, is hereby amended by deleting the exceptions as follows:

**Section 705.10.2. Solvent cementing.**

**Exceptions:** Deleted

- (ff) Section 712.4.3 of the International Plumbing Code, 2021 edition, is hereby added to read as follows:

**Section 712.4.3. Dual pump system.** All sumps shall be automatically discharged and, when in any “public use” occupancy where the sump serves more than 10 fixture units, shall be provided with dual pumps or ejectors arranged to function independently in case of overload or mechanical failure. For storm drainage sumps and pumping systems, see section 1113.

- (gg) Section 713 of the International Plumbing Code, 2021 edition, is hereby amended to read as follows:

**Section 713.  
ENGINEERED DRAINAGE DESIGN**

- (hh) Section 713.1 of the International Plumbing Code, 2021 edition, is hereby amended to read as follows:



**Section 713.1 Design of drainage system.** The sizing, design and layout of the drainage system shall be designed by a registered engineer using *approved* design methods.

- (ii) Section 803.3 of the International Plumbing Code, 2021 edition, is hereby added to read as follows:

**Section 803.3. Special waste pipe, fittings, and components.** Pipes, fittings, and components receiving or intended to receive the discharge of any fixture into which acid or corrosive chemicals are placed shall be constructed of CPVC, high silicone iron, PP, PVDF, chemical resistant glass, or glazed ceramic materials.

- (jj) Section 903.1.1 of the International Plumbing Code, 2021 edition, is hereby amended to read as follows:

**Section 903.1.1. Roof extension unprotected.** Open vent pipes that extend through a roof shall be terminated at least six inches (6") (152 mm) above the roof, except that where a roof is to be used for any purpose other than weather protection, the vent extensions shall be run at least 7 feet (7') (2134 mm) above the roof.

- (kk) Section 918.3 of the International Plumbing Code, 2021 edition, is hereby amended to read as follows:

**Section 918.3 Where permitted.** This section shall only be used with pre-approval from the building official. A request, in writing, must be submitted with the permit application listing all reasons why open air venting cannot be utilized. If approved by the building official ... *{remainder of section unchanged}*.

- (ll) Section 1002.10 of the International Plumbing Code, 2021 edition, is hereby deleted as follows:

**Section 1002.10. Plumbing in mental health centers.** Deleted.

- (mm) Sections 1003.3.5, 1003.3.5.1, 1003.3.5.2, 1003.3.6, 1003.3.7, and 1003.3.8 of the International Plumbing Code, 2021 edition, are hereby deleted and replaced with a new Section 1003.3.5 to read as follows:

**Section 1003.3.5. Sizing and location of traps and interceptors.** When in the determination of the building official a device is needed, the following sizing, definitions, and locations shall apply.

Both interceptor and trap location must be approved and located outside the building. A design must be submitted at time of permit application.

For this section, the following definitions shall apply:

**Grease interceptor-** An interceptor of at least 750 gallons.

**Grease trap-** A device designed to retain grease from one (1) to a maximum of six (6) fixtures. If automatic dishwasher is used, fixture count is limited to a maximum of four (4) fixtures.

**Single serve kitchen-** A kitchen where the meals are served on disposable plates and utensils.

### **GREASE TRAPS:**

If your system is within the definition for a grease trap, use the following sizing formula:

Total gallons per minute x .40 x 12 = Grease trap capacity in gallons.

Fixture	Fixture Abbreviation	Gallons per minute
Three compartment sink	3CP	15
Handwash sink	HWS	7.5
Mop sink	MS	22.5
Floor drain	FD	15
Prep sink	PS	7.5
Soaking sink	SS	7.5
Dishwasher	DW	22.5

### **GREASE INTERCEPTORS:**

If your system does not fall under the definition of grease trap, the following formula must be used:

#### **Sizing Formula**

Number of meals    Waste Flow    Retention    Storage    Interceptor  
Per peak hour    x    rate                    x    time                    x    factor    = gallon capacity

Meals served at peak hour \*  
Waste flow rate

- (a) With dishwashing machine                    6 gal.
- (b) Without dishwashing machine                5 gal.
- (c) Single serve kitchen                            2 gal.

## Retention time

## (a) Commercial kitchen waste

Dishwasher-----	2.5 hours
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(b) Single serve kitchen	1.5 hours
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## Storage factor for fully equipped commercial kitchen - hours of operation

8 hours -	1
16 hours -	2
24 hours -	3
Single serve kitchen -	1.5

\*- Meals served at peak hour may be obtained by the total number of fixed seats multiplied by 60 and divided by the estimated time a patron takes to eat. A restaurant which moves people quickly may have a seating time from 30 minutes to 45 minutes. Another may be from 90 minutes to 120 minutes. Where establishments have no fixed seating, the occupant load in the dining area must be used. For buildings with drive-through windows, an additional 60 occupants or seats must be added to peak meals per hour.

- (nn) Section 1101.8 of the International Plumbing Code, 2021 edition, is hereby amended to read as follows:

**Section 1101.8. Cleanouts required.** Cleanouts or manholes shall be installed in the building storm drainage system and shall comply with the provisions of this code for sanitary drainage pipe cleanouts.

- (oo) Section 1106.1 of the International Plumbing Code, 2021 edition, is hereby amended to read as follows:

**Section 1106.1. General.** The size of the vertical conductors and leaders, building storm drains, building storm sewers, and any horizontal branches of such drains or sewers shall be based on six (6) inches per hour rainfall rate.

- (pp) Section 1108.3 of the International Plumbing Code, 2021 edition, is hereby amended to read as follows:

**Section 1108.3. Sizing of secondary drains.** Secondary (emergency) roof drain systems shall be sized in accordance with section 1106. Scuppers shall be sized to prevent the depth of ponding water from

exceeding that for which the roof was designed as determined by Section 1101.7. Scuppers shall not have an opening dimension of less than four (4) inches (102mm). The flow through the primary system shall not be considered when sizing the secondary roof drain system.

- (qq) Section 1202.1 of the International Plumbing Code, 2021 edition, is hereby amended by deleting the exceptions as follows:

**Section 1202.1. Nonflammable medical gas. Exceptions 1 and 2.** Deleted.

- (rr) Section 102.2 of the International Fuel Gas Code, 2021 edition, is hereby amended by adding an exception to read as follows:

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

- (ss) Section 102.8 of the International Fuel Gas Code, 2021 edition, is hereby amended to read as follows:

**Section 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 National Electrical Code shall mean the electrical code as adopted.

- (tt) Section 306.5 of the International Fuel Gas Code, 2021 edition, is hereby amended, in part, by changing the first paragraph to read as follows:

**Section 306.5. Equipment and appliances on roofs or elevated structures.** Where equipment requiring access or appliances are installed on roofs or elevated structures at an aggregate height exceeding sixteen (16) feet (4,877 mm), such access shall be provided by a permanent interior or exterior approved means of access. Permanent exterior ladders providing roof access need not extend closer than twelve (12) feet (2,438 mm) to the finish grade or floor level below and shall extend to the equipment and appliance's 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 section remains unchanged.}*

- (uu) Section 306.5.1 of the International Fuel Gas Code, 2021 edition, is hereby amended to read as follows:

**Section 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*.

- (vv) Section 306.7 of the International Fuel Gas Code, 2021 edition, is hereby added to read as follows:

**Section 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 (2,438 mm) above the ground or floor level, it shall be made accessible by a stairway or permanent ladder fastened to the building.

**Exception:** A max 10 gallon water heater (or larger with approval) that is installed not more than ten (10) feet (3,048 mm) above the ground or floor level, may be accessible with a portable ladder.

Whenever the mezzanine or platform is not adequately lighted or access to a receptacle outlet is not obtainable from the main level, lighting and a receptacle outlet shall be provided in accordance with section 306.3.1.

- (ww) Section 401.5 of the International Fuel Gas Code, 2021 edition, is hereby amended by adding a second paragraph to read as follows:

**Section 401.5. Identification.** {Existing paragraph remains unchanged.}

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 or stainless steel, and the following wording shall be stamped into the tag:

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

- (xx) Section 402.3 of the International Fuel Gas Code, 2021 edition, is hereby amended by adding an exception to read as follows:

**Section 402.3. Sizing. Exception:** Corrugated stainless steel tubing (CSST) shall be a minimum of ½ inch (18EHD).

- (yy) Section 404.12 of the International Fuel Gas Code, 2021 edition, is hereby amended to read as follows:

**Section 404.12. Minimum burial depth.** Underground piping systems shall be installed a minimum depth of 18 inches (18") (458 mm) below grade to the top of the pipe.

- (zz) Section 404.12.1. of the International Fuel Gas Code, 2021 edition, is hereby amended to read as follows:

**Section 404.12.1. Individual outdoor appliances.** Deleted.

- (aaa) Section 406.1 of the International Fuel Gas Code, 2021 edition, is hereby amended to read as follows:

**Section 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.

- (bbb) Section 406.4 of the International Fuel Gas Code, 2021 edition, is hereby amended to read as follows:

**Section 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.

- (ccc) Section 406.4.1 of the International Fuel Gas Code, 2021 edition, is hereby amended to read as follows:

**Section 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 (3 ½) inches, a set hand, 1/10 pound incrementation and pressure range not to exceed 6 psi for tests requiring a pressure of three (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 (3 ½) inches, a set hand, a minimum of 2/10 pound incrementation and a pressure range not to exceed twenty (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.

- (ddd) Section 406.4.2 of the *International Fuel Gas Code*, 2021 edition, is hereby amended to read as follows:

**Section 406.4.2. Test duration.** Test duration shall be held for a length of time satisfactory to the building 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 of water column pressure (3.48 kPa), the test duration shall be held for a length of time satisfactory to the building official, but in no case for less than thirty (30) minutes.

- (eee) Section 409.1.4 of the *International Fuel Gas Code*, 2021 edition, is hereby added to read as follows:

**Section 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 twelve (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.

- (fff) Section 410.1 of the *International Fuel Gas Code*, 2021 edition, is hereby amended by adding a second paragraph and exception to read as follows:

**Section 410.1. Pressure regulators.** {Existing paragraph remains unchanged.}

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.

- (ggg) Section 621.2 of the *International Fuel Gas Code*, 2021 edition, is hereby amended by adding an exception to read as follows:

**Section 621.2. Prohibited use.**

**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.

#### **SECTION 4**

All ordinances, orders, or resolutions heretofore passed and adopted by the Town of Flower Mound, Texas, are hereby repealed to the extent that said ordinances, orders, or resolutions, or parts thereof, are in conflict herewith.

#### **SECTION 5**

If any section, subsection, clause, phrase, or provision of this Ordinance, or the application thereof to any person or circumstance, shall to any extent be held by a court of competent jurisdiction to be invalid, void, or unconstitutional, the remaining sections, subsections, clauses, phrases, and provisions of this Ordinance, or the application thereof to any person or circumstance, shall remain in full force and effect and shall in no way be affected, impaired, or invalidated.

#### **SECTION 6**

Any person who violates any provision of this Ordinance shall be deemed guilty of a misdemeanor and, upon conviction thereof, shall be punished by a fine as provided



in Section 1.06 of Chapter 1 of the Code of Ordinances of the Town of Flower Mound, Texas. Each day any such violation or violations exist shall constitute a separate offense and shall be punishable as such.

#### **SECTION 7**

The Town Secretary of the Town of Flower Mound is hereby directed to publish the caption in the official newspaper of the Town of Flower Mound as required by Section 3.07 of the Charter of the Town of Flower Mound.

#### **SECTION 8**

This Ordinance shall take effect and be in full force from and after its passage and publication, as provided by the Revised Civil Statutes of the State of Texas and the Home Rule Charter of the Town of Flower Mound, Texas.

**DULY PASSED AND APPROVED BY THE TOWN COUNCIL OF THE TOWN OF FLOWER MOUND, TEXAS, BY A VOTE OF 5 TO 0, ON THIS 18TH DAY OF APRIL 2022.**

**APPROVED:**

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**Derek France, MAYOR**

**ATTEST:**

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**Theresa Scott, TOWN SECRETARY**