

ORDINANCE NO. 25385-03-2022

AN ORDINANCE AMENDING THE FORT WORTH PLUMBING CODE, BY ADOPTING THE 2021 INTERNATIONAL PLUMBING CODE AND THE 2021 INTERNATIONAL FUEL GAS CODE, WITH LOCAL AMENDMENTS; AMENDING SECTIONS 26-1, 26-2, 26-3 AND 26-4 OF THE CODE OF THE CITY OF FORT WORTH (2015); REGULATING THE ERECTION, CONSTRUCTION, ENLARGEMENT, ALTERATION, REPAIR, MOVING, REMOVAL, DEMOLITION, CONVERSION, EQUIPMENT, USE AND MAINTENANCE OF PLUMBING, DRAINAGE AND FUEL GAS SYSTEMS FOR BUILDINGS AND STRUCTURES IN THE CITY OF FORT WORTH, AND PLUMBING AND DRAINAGE SYSTEMS OUTSIDE THIS JURISDICTION IF THE SAME ARE CONNECTED TO THE CITY WATER OR SEWAGE SYSTEMS; DEFINING CERTAIN TERMS; ESTABLISHING MINIMUM REQUIREMENTS FOR THE INSTALLATION, ALTERATION OR REPAIR OF PLUMBING, DRAINAGE AND FUEL GAS SYSTEMS; PROVIDING FOR THE ISSUANCE OF PERMITS AND THE COLLECTION OF FEES THEREOF; PROVIDING FOR THE INSPECTION OF PLUMBING, DRAINAGE AND FUEL GAS SYSTEMS; PROVIDING FOR A SEVERABILITY CLAUSE; PROVIDING FOR A SAVINGS CLAUSE; PROVIDING FOR A PENALTY CLAUSE; PROVIDING THAT THIS ORDINANCE SHALL BE CUMULATIVE; PROVIDING FOR PUBLICATION IN PAMPHLET FORM; PROVIDING FOR PUBLICATION IN THE OFFICIAL NEWSPAPER; AND PROVIDING AN EFFECTIVE DATE.

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF FORT WORTH, TEXAS:

SECTION 1.

That Section 26-1 of the Code of the City of Fort Worth (2015) is hereby amended to read as follows:

Sec. 26-1. THE 2021 EDITION OF THE INTERNATIONAL PLUMBING CODE AND THE 2021 EDITION OF THE INTERNATIONAL FUEL GAS CODE ADOPTED.

(a) The Plumbing Code of the City of Fort Worth is hereby revised and amended to conform, with certain exceptions as specified below, to the 2021 International Plumbing Code and the 2021 International Fuel Gas Code of the International Code Council (ICC), and the same as amended are hereby adopted as the City's Plumbing Code. One (1) copy of the 2021 International Plumbing Code, marked as Exhibit "A", and One (1) copy of the 2021 edition of the International Fuel Gas Code, marked Exhibit "B", is incorporated herein by reference and shall be filed in the Office of the City Secretary for permanent record and inspection.

(b) The following provisions of the Appendix to the 2021 International Plumbing Code are hereby specifically adopted as amended as part of the Plumbing Code of the City of Fort Worth:

Appendix Chapter C, Structural Safety

Appendix Chapter E, Sizing of Water Piping Systems

(c) The plumbing and fuel gas provisions of the *International Residential Code*, as adopted elsewhere, shall be used as the plumbing and fuel gas provisions for buildings and structures applicable to that code except as provided for in that code.

(d) Any Errata corrections published by the International Code Council for the 2021 International Plumbing Code or the 2021 International Fuel Gas Code, as they are discovered, are considered as part of this code.

SECTION 2.

That Section 26-2 of the Code of the City of Fort Worth (2015) is hereby amended to read as follows:

Sec. 26-2. Amendments.

The 2021 edition of *International Plumbing Code* and of the 2021 *International Fuel Gas Code* is hereby amending to read as follows:

(a) Chapters 1” “Part I – Scope and Application” and “Part 2 – Administration and Enforcement” of the 2021 *International Plumbing Code* and of the 2021 *International Fuel Gas Code* shall be governed by the Fort Worth Building Administrative Code;

(b) The remaining sections of the 2021 *International Plumbing Code* are hereby amended as follows:

IPC TABLE OF CONTENTS

*IPC Table of Contents, Chapter 7, Section 713; changed to read as follows:

Section 713 Engineered Drainage Design 7-12

CHAPTER 2 – DEFINITIONS

**IPC SECTION 202
DEFINITIONS**

*IPC Section 202; definitions are changed and new definitions are added to read as follows:

BUILDING CODE. Building Code shall mean the *International Building Code* as adopted by this jurisdiction.

CHANGE OF OCCUPANCY. A change in the purpose or level of activity within a building that involves a change in application of the requirements of this code. The definition shall also apply to usage of the surrounding site and access to and from the building, structure or site, as necessary to achieve the purpose of this code, and to obtain compliance with other codes and ordinances of this jurisdiction.

ELECTRICAL CODE. Electrical Code shall mean the *National Electrical Code* as adopted by this jurisdiction. For the purpose of this code, all references to NFPA 70 shall be assumed to mean the Electrical Code as defined herein.

ENERGY CODE. Energy Code shall mean the *International Energy Conservation Code* as adopted by this jurisdiction.

FIRE PREVENTION CODE (FIRE CODE). Fire Prevention Code, or Fire Code, shall mean the *International Fire Code* as adopted by this jurisdiction.

FORT WORTH BUILDING ADMINISTRATIVE CODE. The Fort Worth Administrative code containing the administrative, organizational, and enforcement rules and regulations for the Fort Worth Building, Residential, Plumbing, Fuel Gas, Mechanical, Electrical, Sign and Existing Building codes.

FUEL GAS CODE. Fuel Gas code shall mean the *International Fuel Gas Code* as adopted by this jurisdiction and shall be considered as part of the Plumbing Code. (See Plumbing Code.)

MECHANICAL CODE. Mechanical Code shall mean the *International Mechanical Code* as adopted by this jurisdiction.

PLUMBING.

For the purpose of using the *International Plumbing Code*, as adopted, shall mean:

The practice, materials and fixtures utilized in the installation, maintenance, extension and alteration of all piping, fixtures, plumbing appliances and plumbing appurtenances, within or adjacent to any structure, in connection with sanitary drainage or storm drainage facilities; venting systems, and public or private water supply systems.

For the purpose of complying with the Texas State Plumbing License Law, shall mean:

All piping, fixtures, appurtenances, and appliances, including disposal systems, drain or waste pipes, or any combination of these that:

supply, recirculate, drain, or eliminate water, gas, medical gasses and vacuum, liquids, and sewage for all personal or domestic purposes in and about buildings where persons live, work, or assemble; connect the building on its outside with the source of water, gas, or other liquid supply, or combinations of these, on the premises, or the water main on public property; and carry waste water or sewage from or within a building to the sewer service lateral on public property or the disposal or septic terminal that holds private

or domestic sewage.

The installation, repair, service, maintenance, alteration, or renovation of all piping, fixtures, appurtenances, and appliances on premises where persons live, work, or assemble that supply gas, medical gasses and vacuum, water, liquids, or any combination of these, or dispose of waste water or sewage.

PLUMBING CODE. Plumbing Code shall mean the *International Plumbing Code* and the *International Fuel Gas Code* as adopted by this jurisdiction. The term "Plumbing Code" applies to both codes as one combined code.

PLUMBING SYSTEM.

For the purpose of using the *International Plumbing Code*, as adopted, shall mean:

Includes the water supply and distribution pipes; plumbing fixtures and traps; water-treating or water-using equipment; soil, waste and vent pipes; and sanitary and storm sewers and building drains, in addition to their respective connections, devices and appurtenances within a structure or premise.

PREMISES.

1. A single tract or platted lot.
2. Multiple adjacent tracts or platted lots under common ownership will be deemed to be a **SINGLE PREMISES** if they meet the following requirements:
 - a. Lots or tracts are not separated by intervening streets, alleys, utility or railroad rights-of-way or other interruption;
 - b. Property contains a single primary use; and
 - c. Property is not used for one- or two-family residential purposes.
3. Tracts or platted lots that are at cross corners or that are connected by narrow strips of land too small to serve as emergency access easements shall not be considered to be adjacent.

PRIVATE. In the classification of plumbing fixtures, "*private*" applies to fixtures-in residences and apartments, and to fixtures in nonpublic toilet rooms of hotels and motels and similar installations in buildings where the plumbing fixtures are intended for utilization by a family or an individual.

PUBLIC OR PUBLIC UTILIZATION. In the classification of plumbing fixtures, "*public*" applies to fixtures in general toilet rooms of schools, gymnasiums, hotels, airports, bus and railroad stations, public buildings, bars, public comfort stations, office buildings, stadiums, stores, restaurants and other installations where a number of fixtures are installed so that their utilization is similarly unrestricted.

RESIDENTIAL CODE. Residential Code shall mean the *International Residential Code* as adopted by this jurisdiction.

CHAPTER 3 – GENERAL REGULATIONS

**IPC SECTION 301
GENERAL**

**IPC Section 301.6; changed to read as follows:*

301.6 Prohibited locations. Plumbing systems shall not be located in an elevator shaft or in an elevator equipment room.

Exception: Floor drains, sumps and sump pumps shall be permitted at the base of the shaft, provided that they are indirectly connected to the plumbing system and comply with Sections 317 and 1003.4.

**IPC Section 301.8; added to read as follows:*

301.8 Location. Except as otherwise provided in this Code or other applicable ordinances, no plumbing system, drainage system, building sewer, private sewage disposal system or parts thereof, shall be located in any lot other than the lot which is the site of the building, structure, or premises served by such facilities.

No subdivision, sale, or transfer of ownership of existing property shall be made in such manner that the area, clearance, and access requirements of this Code are decreased.

**IPC SECTION 305
PROTECTION OF PIPES AND PLUMBING SYSTEM COMPONENTS**

**IPC Section 305.1; changed to read as follows:*

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 an 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.

**IPC Section 305.4; changed to read as follows:*

305.4 Freezing. Water, soil and waste pipes shall not be installed outside of a building, in attics or crawl spaces, concealed in outside walls, or in any other place subjected to freezing temperatures unless adequate provision is made to protect such pipes from freezing by insulation (3/4" wall in attics or under floor and 1/2" wall in exterior walls) or heat or both. Exterior water supply system piping shall be installed not less than 6 inches (152 mm) below the frost line and

not less than 12 inches (305 mm) below grade.

*IPC Section 305.4.1; changed to read as follows:

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

*IPC Section 305.7; changed to read as follows:

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

IPC SECTION 312 TESTS AND INSPECTIONS

*IPC Sections 312.10.1 and 312.10.2; changed to read as follows:

312.10.1 Inspections. Annual inspections shall be made of all backflow prevention assemblies and *air gaps* to determine whether they are operable and air gaps exist. In the absence of local provisions, the owner is responsible to ensure that testing is performed.

312.10.2 Testing. 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:

{list of standards unchanged}

IPC SECTION 314 CONDENSATE DISPOSAL

*IPC Section 314.2.1; change to read as follows:

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. Such piping shall maintain a minimum horizontal slope in the direction of discharge of not less than one-eighth unit vertical in 12 units horizontal (1-percent slope). Condensate shall not discharge into a walking

surface such as a street, alley, sidewalk or other areas so as to cause a nuisance. Rooftop units may be piped to discharge into roof drains when such drains do not discharge onto a walking surface as listed above.

*IPC Section 314.2.2; change to read as follows:

314.2.2 Drain pipe materials and sizes. Components of the condensate disposal system shall be ABS, cast iron, copper and copper-alloy, CPVC, cross-linked polyethylene galvanized steel, PE-RT, polyethylene, polypropylene, PVC, or PVDR pipe or tubing. Components shall be selected for the pressure, temperature and exposure rating of the installation. Joints and connections shall be made in accordance with the applicable provisions of Chapter 7 relative to the material type. Condensate waste and drain line size shall be not less than the discharge size of the pan but not less than ¾-inch (19 mm) pipe size and shall not decrease in size from the drain pan connection to the place of condensate disposal. Where the drain pipes from more than one unit are manifolded together for condensate drainage, the pipe or tubing shall be sized in accordance with Table 314.2.2. All horizontal sections of drain piping shall be installed in uniform alignment at a uniform slope.

*IPC Section 314.2.3, item #2; add a sentence to read as follows:

2. A separate overflow drain line shall be connected to the drain pan provided with the equipment. Such overflow drain shall discharge to a conspicuous point of disposal to alert occupants in the event of a stoppage of the primary drain. The conspicuous point of disposal shall not create a hazard such as dripping over a walking surface or other areas so as to create a nuisance. The overflow drain line shall connect to the drain pan at a higher level than the primary drain connection.

*IPC Section 314.2.3; add #5 to read as follows:

5. A listed and labeled water detecting device shall be provided that will shut off up-flow equipment in the event the primary drain is blocked. The device shall be installed on all up flow equipment above the first floor and shall be installed beneath and on the floor of the up-flow equipment it serves.

IPC SECTION 317 ELEVATOR DRAINAGE

*IPC Section 317; added to read as follows:

317.1 Elevator Drainage. Drainage shall be provided in the elevator pits as required by the Elevator Code and as listed in this section. Drainage discharge, whether drainage is required or voluntary, shall comply with Section 315.4.

317.2 Pits. (ASME A17.1 – Section 2.2.1; Inquiry 07-50) A pit shall be provided for each individual elevator.

317.3 Drainage. (ASME A17.1 – Section 2.2.2.3 thru 2.2.2.6)

- 2.2.2.3 Permanent provisions shall be made to prevent accumulation of ground water in the pit.
- 2.2.2.4 Drains and sump pumps, where provided, shall comply with the applicable plumbing code, and they shall be provided with a positive means to prevent water, gases, and odors from entering the hoistway.
- 2.2.2.5 In elevators provided with Firefighters' Emergency Operation, a drain or sump pump shall be provided. The sump pump/drain shall have the capacity to remove a minimum of 11.4 m³/h (3,000 gal/h) per elevator.
- 2.2.2.6 Sumps and sump pumps in pits, where provide, shall be covered. The cover shall be secured and level with the pit floor.

317.4 Discharge. Discharge shall comply with the following:

1. Where there is no expectation of hydraulic fluid or oil contamination, the sump may discharge into the sanitary sewer system.
2. If installed in a location with possible contamination, a trap or interceptor rated for the expected flow rate with a minimum "storage" capacity equivalent to the volume of hydraulic fluid or oil that could be leaked into the sump, will be required prior to discharge into the sanitary sewer.
3. In either situation, discharge to the storm drainage system is not permitted.
4. Gravity drains that comply with the above provisions should be discussed with the Plumbing Inspection Specialist before installation.
5. Drainage to a storage tank is not permitted without specific approval.

317.5 Other pipes, ducts or electrical wiring. See Building Code, Sections 3004.4 and 30065.6 and the following:

(ASME A17.1 – Section 2.8.2.2) Only such electrical wiring, raceways, cables, coaxial wiring, and antennas used directly in connection with the elevator, including wiring for signals, for communication with the car, for lighting, heating, air conditioning, and ventilating the car, for fire detecting systems, for pit sump pumps, and for heating and lighting the hoistway and/or the machinery space, machine room, control space, or control room shall be permitted to be installed inside the hoistway, machinery space, machine room, control space, or control room.

(ASME A17.1 – Section 2.8.3.4) Other pipes or ducts conveying gases, vapors, or liquid and not used in connection with the operation of the elevator shall not be installed in any hoistway, machinery space, machine room, control space or control room. Where a machinery space, machine room, control space, control room, or hoistway extend above the roof of a building, pipes shall be permitted from roof drains to the closest point where they can be diverted out of this space. Pipes shall be covered to prevent leakage or condensate from entering the machine space, machine room, control space, control room, or hoistway.

CHAPTER 4 – FIXTURES, FAUCETS AND FIXTURE FITTINGS

**IPC SECTION 403
MINIMUM FACILITIES**

*IPC Section 403.1; changed to read as follows:

403.1 Minimum number of fixtures. Plumbing fixtures shall be provided for the type of occupancy and in the minimum number shown in Table 403.1, based on the actual use of the building or space and as follows:

1. Self-service storage facilities: shall be provided with one unisex accessible restroom for tenant usage.
2. Each Recreational Vehicle Park, or portion of a Manufactured Home Park used for recreational vehicles, shall contain one (1) or more service buildings providing separate sanitary facilities for men and women.

- a. No lot space shall be located farther than five hundred (500) feet from such a service building.
- b. The entrances to such buildings shall be clearly marked to show which gender the facilities serve.
- c. Fixtures shall be provided at the following ratio per twenty (20) lots or fraction thereof:

Toilets:	Men (1) / Women (2)
Urinals:	Men (1)
Lavatories:	Men (1) / Women (1)
Showers:	Men (1) / Women (1)

- d. Each building providing sanitary fixtures shall contain at least one (1) slop sink.
- e. If male and female sanitary facilities are housed within the same structure, they shall be separated by walls extending from the floor to the ceiling.
- f. Toilets shall be located in separate compartments equipped with self-closing doors. Shower stalls shall be individual and equipped with self-closing doors. If dressing compartments are provided, each compartment shall be equipped with a stool or a bench. The rooms shall be screened to prevent direct view of the interior when the exterior doors are open.

Uses not shown in Table 403.1 shall be considered individually by the code official. The number of occupants shall be determined by the *International Building Code*. In other than E occupancies, the minimum number of fixtures in Table 2902.1 may be lowered, if requested in writing, by the applicant stating reasons for a reduced number and approved by the *code official*.

*IPC Table 403.1; add a footnote "g" in the title and after the table as follows:

DRINKING FOUNTAINS
(SEE SECTION 410)^g

g. Drinking fountains are not required in M Occupancies with an occupant load of 100 or less, B Occupancies with an occupant load of 25 or less, and for dining and/or drinking establishments.

*IPC Section 403.1.4; added to read as follows:

403.1.4 Additional fixtures for food preparation facilities. In addition to the fixtures required in this Chapter 4, all food service facilities shall be provided with additional fixtures set out in this section.

403.1.4.1 Hand washing lavatory. At least one hand washing lavatory shall be provided for use by employees that is accessible from food preparation, food dispensing and ware washing areas. Additional hand washing lavatories may be required based on convenience of use by employees.

403.1.4.2 Service sink. In new or remodeled food service establishments, at least one service sink or one floor sink shall be provided so that it is conveniently located for the cleaning of mops or similar wet floor cleaning tool and for the disposal of mop water and similar liquid waste. The location of the service sink(s) and/or mop sink(s) shall be approved by the City of Fort Worth Consumer Health Section.

*IPC Section 403.2; changed to read as follows:

403.2 Separate facilities. Where plumbing fixtures are required, separate facilities shall be provided for each sex.

Exceptions:

1. Separate facilities shall not be required for private dwelling units or sleeping units.
2. Separate facilities shall not be required in structures or tenant spaces with a total *occupant load*, including both employees and customers, of 50 or fewer.
3. Separate facilities shall not be required in mercantile occupancies in which the maximum occupant load is 100 or less.
4. Separate facilities shall not be required in business occupancies in which the maximum occupant load is 25 or fewer.
5. Separate facilities shall not be required to be designated by sex where single-user toilets rooms are provided in accordance with Section 403.1.2.
6. Self-service storage facilities need only provide one unisex restroom for storage tenant usage. A single unisex employee restroom, when permitted and when accessible by the tenants, may count for such restroom. Such restroom shall be located near the facility entrance. Spaces converted to uses other than self-service storage shall comply with other applicable restroom provisions for that individual space.
7. Aircraft T-hangar facilities need not install tenant restrooms when in compliance with the following:
 - a. Each such tenant hangar space is less than 2,000 square feet in area.
 - b. There are restrooms located within 500 feet of the lease space.

*IPC Section 403.3; change to read as follows:

403.3 Required public toilet facilities. For structures and tenant spaces intended for *public* utilization, customers, patrons, and visitors shall be provided with *public* toilet facilities. Employees associated with structures and tenant spaces shall be provided with toilet facilities. Facilities for public and employee use may be located in adjacent structures on the same property and under the same ownership, lease or control. The number of plumbing fixtures located within the required toilet facilities shall be provided in accordance with section 403 for all users. Toilet rooms or bathing rooms accessed only through a private office shall not be counted toward compliance with section 403. Employee toilet facilities shall be either separate or combined employee and *public* toilet facilities.

Exceptions: *{unchanged}*

IPC SECTION 413 FLOOR AND TRENCH DRAINS

*IPC Section 413.4; changed to read as follows:

413.4 Required location. Floor drains shall be installed in the following areas:

1. In public laundries and in the central washing facilities of multiple family dwellings, the rooms containing the automatic clothes washers shall be provided with floor drains located to readily drain the entire floor area. Such drains shall have a minimum outlet cross section of not less than 3 inches (76 mm) in diameter.
2. Commercial kitchens. (In lieu of floor drains in commercial kitchens, the code official may accept floor sinks.)
3. Toilet rooms containing two (2) or more water closets or a combination of one (1) water closet and one (1) urinal, except in a dwelling unit. The floor shall slope toward the floor drains.

IPC SECTION 421 SHOWERS

*IPC Section 421.5.2; changed to read as follows:

421.5.2 Shower lining. Floors under shower compartments, except where prefabricated receptors have been provided, shall be lined and made water tight utilizing material complying with Sections 417.5.2.1 through 417.5.2.5. Such liners shall turn up on all sides at least 3 inches (76 mm) above the finished threshold level and shall extend outward over the threshold, where provided, and fastened to the outside of the threshold jamb. Liners shall be recessed and fastened to an *approved* backing . . . *{bulk of section unchanged}* . . . shall be tested in

accordance with Section 312.9.

IPC SECTION 424 URINALS

*IPC Section 424.3; added to read as follows:

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.

*IPC Section 424.4; added to read as follows:

424.4 Waterless urinals. Installation of waterless urinals shall be permitted when installed in accordance with the following:

A person who installs a nonwater-supplied urinal shall install water distribution and fixture supply piping sized to accommodate a water-supplied urinal to an in-wall point immediately adjacent to the nonwater-supplied urinal location so that the nonwater-supplied urinal can be replaced with a water-supplied urinal if desired by the owner or required by a code enforcement officer. (SL – HB 2667-2009, Section 372.006(c)).

CHAPTER 5 – WATER HEATERS

IPC SECTION 502 INSTALLATION

*IPC Section 502.3; changed to read as follows:

502.3 Water heaters installed in attics. Attics containing a water heater shall be provided . . . {bulk of paragraph unchanged} . . . side of the water heater. The clear *access* opening dimensions shall be a minimum of 20 inches by 30 inches (508 mm by 762 mm), or larger where such dimensions are large enough to allow removal of the water heater.

Water heaters shall not be installed in residential attics.

Exception: Tankless water heaters.

**IPC Section 502.3.1; added to read as follows:*

502.3.1 Electrical requirements. A luminaire controlled by a switch located at the required passageway opening and a receptacle outlet shall be provided at or near the equipment location in accordance with the electrical code.

IPC SECTION 504 SAFETY DEVICES

**IPC Section 504.6; changed to read as follows:*

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. When the drain pipe is run exposed in an area outside of the room where the water heater is located, in a manner that would make it subject to damage, the drain shall discharge through an *air gap* located in the same room as the water heater.
3. Not be smaller than the diameter of the outlet of the valve served and shall discharge full size to the point of disposal.
4. Serve a single relief device and shall not connect to piping serving any other relief device or equipment.

Exception: Multiple relief devices of a single tenant may be installed to a single T & P discharge piping system when *approved* by the code official and permitted by the manufacture's installation instructions and installed with those instructions. Relief devices of multiple tenants may only share the same discharge system when *approved* by the code official and the discharge point is in a common area under the building owner's control.

5. Discharge to the floor drain, to an indirect waste receptor or to the outdoors. The point of disposal shall not be in another tenant area. Where discharging to the outdoors in areas subject to freezing, discharge piping shall be first piped to an indirect waste receptor through an *air gap* located in a conditioned area. The discharge pipe shall not discharge into the pan required in Section 504.7.

Exception: When a water heater retrofit or replacement occurs on a slab foundation and the line cannot be discharged to an approved location the T&P discharge line can be piped to the water heater pan provided with all of the following:

1. An approved mechanical device is installed that will shut off the water supply to the water heater when water is detected inside the pan;
 2. A device is installed that will sound an audible alarm when water is detected inside the pan to alert the occupants that a leak has occurred.
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 more than 6 inches (152 mm) above the floor drain or waste receptor. When discharging outside the building, the point of discharge shall be with the end of the pipe not more than two (2) feet (610 mm) nor less than six (6) inches (152 mm) above the ground or the floor level of the area receiving the discharge and pointing downward.
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.

CHAPTER 6 – WATER SUPPLY AND DISTRIBUTION

IPC SECTION 602 WATER REQUIRED

**IPC Section 602.4; added to read as follows:*

602.4 Manufactured Home Parks and Recreational Vehicle Parks. The water supply for manufactured home and recreational vehicle parks shall be provided in accordance with the following:

1. An accessible, adequate, safe and potable supply of water under pressure shall be provided in each manufactured home park and recreational vehicle parks for domestic purposes. Connection for manufactured homes shall be made to the public water system.
2. The water supply system of a manufactured home park and recreational vehicle park shall be connected by pipes to all manufactured homes, individual recreational vehicles sites, buildings, and other facilities requiring water, with water flowing under pressure to each connection at all times.
3. Service lines, valves, and riser pipes shall be insulated pursuant to this code.

IPC SECTION 604 DESIGN OF BUILDING WATER DISTRIBUTION SYSTEMS

**IPC Section 604.4 .1; added to read as follows:*

604.4.1 State maximum flow rate. Where the State mandated maximum flow rate is more restrictive than those of this section, the State flow rate shall take precedence.

**IPC Section 604.9; add an exception to read as follows:*

Exception: Water-hammer arrestors shall not be required in residential applications.

IPC SECTION 606 INSTALLATION OF BUILDING WATER DISTRIBUTION SYSTEM

**IPC Section 606.1; delete items #4 and 5.*

**IPC Section 606.1; change item #8 to read as follows:*

8. On the water supply pipe to every water heater or hot water storage tank. Access to the valve shall be on the same floor, located near the equipment and only serving the hot water storage tank or water heater. The valve shall not interfere or cause a disruption of the cold water supply to the remainder of the cold water system.

**IPC Section 606.2, item #2; delete.*

IPC SECTION 608 PROTECTION OF POTABLE WATER SUPPLY

**IPC Section 608.1; changed to read as follows:*

608.1 General. A potable water supply system shall be designed, installed and maintained in such a manner so as to prevent contamination from nonpotable liquids, solids or gases being introduced into the potable water supply through cross-connections or any other piping connections to the system. Back flow preventer applications shall conform to applicable local regulations, Table 608.1, and as specifically stated in Sections 608.2 through 608.16.9.

**IPC Section 608.17.5; changed to read as follows:*

608.17.5 Connections to lawn irrigation systems. The potable water supply to lawn irrigation systems shall be protected against backflow by an atmospheric vacuum breaker, a pressure vacuum breaker, a double-check assembly or a reduced pressure principle backflow preventer. Valves . . . *{remainder of section unchanged}* . . . backflow prevention assembly.

**IPC Section 608.18; changed to read as follows:*

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.

**IPC SECTION 609
HEALTH CARE PLUMBING**

**IPC Section 609.2.1; changed to read as follows:*

609.2.1 Tracer wire for nonmetallic piping. An insulated tracer wire listed for the purpose or other *approved* conductor shall be installed adjacent to underground nonmetallic piping serving as a water service for a group I-2, condition 2 facility. *Access* shall be provided to the tracer wire or the tracer wire shall terminate above ground at each end of the nonmetallic piping. The tracer wire size shall be not less than 18 AWG and the wire insulation type shall be suitable for direct burial.

CHAPTER 7 – SANITARY DRAINAGE

**IPC SECTION 701
GENERAL**

**IPC Section 701.8, 701.9 and 701.10; added to read as follows:*

701.8 Abandoned building sewers and private disposal systems. All abandoned building sewers and private sewer disposal systems shall be plugged or capped in an approved manner. All abandoned treatment tanks and seepage pits shall have the contents pumped and discarded in an approved manner. The top or entire tank shall be removed and the remaining portion of the tank or excavation shall be filled immediately after connection to a public sewer system or after abandonment of a private sewage disposal system. The permittee shall be responsible for the filling of the tank.

701.9 Manufactured Home Parks. The following provisions shall apply to manufactured home parks shall:

1. Each manufactured home park shall be provided with a sewage disposal system that complies with all federal, state, and local laws. Septic tanks for the disposal of sewage shall not be permitted.
2. Each manufactured home stand shall be provided with a sewer riser pipe conforming to each of the following requirements:
 - a. The pipe shall have a minimum diameter of four (4) inches.
 - b. The pipe shall be located on each stand so that the sewer connection to the manufactured home drain outlet will approximate a vertical position.
 - c. The pipe shall be plugged when no manufactured home occupies the space.

- d. Surface drainage shall be diverted away from the pipe.

701.10 Recreational Vehicle Parks. The following provisions shall apply to Recreational Vehicle Parks and Recreational Vehicle lots that occur in Manufactured Home Parks.

1. Each recreational vehicle park shall be provided with a sewage disposal system that complies with all federal, state, and local laws. Septic tanks for the disposal of sewage shall not be permitted.
2. Individual sewer connections shall conform to the following:
 - a. If individual sewer connections are provided, they shall consist of at least a four-inch (4") diameter sewer riser pipe. A sewer riser pipe located at a lot shall be installed so that the sewer connection to the recreational vehicle drain outlet will be functional and sanitary.
 - b. Sewer riser pipes shall be plugged when a recreational vehicle does not occupy the lot.
 - c. Surface drainage shall be diverted away from the riser pipe.
3. Each recreational vehicle park shall contain waste disposal stations for the sole purpose of removing and disposing of wastes from recreational vehicle holding tanks in a clean, efficient and convenient manner. Except as provided in subsection (4), waste disposal stations shall meet the following:
 - a. Each waste disposal station shall consist of a drainage basin constructed of impervious material, containing a disposal hatch and self-closing cover, and related washing facilities. Such units shall be provided on the basis of one (1) for every one hundred (100) lots or fraction thereof.
 - b. Waste disposal stations shall be located a minimum of fifty (50) feet from any lot. They shall be blocked from view by a screening device.
 - c. The disposal hatch of each waste disposal station unit shall be connected to the park sewage disposal system. Facilities for washing holding tanks and the station area shall be connected to the park water supply system.
4. In lieu of or in addition to community waste disposal stations, a recreational vehicle park may provide waste disposal facilities at each lot. The design of such facilities shall comply with all applicable city codes.

**IPC SECTION 704
DRAINAGE PIPING INSTALLATION**

*IPC Section 704.5; added to read as follows:

704.5 Single stack fittings. Drainage system utilizing single stack fittings with internal baffles, PVC schedule 40 or cast-iron single stack shall be designed by a registered engineer.

IPC SECTION 712 SUMPS AND EJECTORS

*IPC Section 712.5; added to read as follows:

712.5 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, see Section 1113.)

IPC SECTION 713 ENGINEERED DRAINAGE DESIGN

*IPC Section 713.1; changed to read as follows:

ENGINEERED DRAINAGE DESIGN

713.1 Design of drainage system. The sizing, design and layout of the drainage system shall be permitted to be designed by *approved* design methods that are not in conflict with this code.

CHAPTER 8 – INDIRECT/SPECIAL WASTE

IPC SECTION 802 INDIRECT WASTES

*IPC Section 802.4.3; change to read as follows:

802.4.3 Standpipes. Standpipes shall be individually trapped. Standpipes shall extend not less than 18 inches (457 mm) but not greater than 42 inches (1066 mm) above the trap weir. *Access* shall be provided to all standpipes and drains for rodding. Standpipes serving automatic clothes washers shall have their traps above the floor level. No standpipe shall be installed below the ground.

IPC SECTION 804 CONDENSATE WASTE

*Section 805; added to read as follows:

804.1 Condensate waste. When the condensate waste from air conditioning coils discharges by direct connection to a lavatory tailpiece or to an approved accessible inlet on a bathtub overflow, the connection shall be located in the area controlled by the same person controlling the air-conditioned space.

CHAPTER 9 – VENTS

IPC SECTION 903 VENT TERMINALS

**IPC Section 903.1.1; changed to read as follows:*

903.1 Roof extension unprotected. Open vent pipes that extend through a roof shall be terminated not less than six (6) inches (152 mm) above the roof.

**IPC Section 903.1.2; changed to read as follows:*

903.1.2 Roof used for any purposes. Where a roof is to be used for any purpose other than weather protection or equipment and appliance maintenance, open vent pipes shall terminate not less than 7 feet (2134 mm) above the roof.

IPC SECTION 909 FIXTURE VENTS

**IPC Section 909.1; delete the exception.*

IPC SECTION 915 COMBINATION WASTE AND VENT SYSTEM

**IPC Section 915.1 changed to read as follows:*

915.1 Type of fixture. A combination waste and vent system shall not serve fixtures other than floor drains, standpipes, indirect waste receptors, sinks, lavatories and drinking fountains. Combination waste and vent systems shall not receive the discharge from a clinical sink.

CHAPTER 10 – TRAPS, INTERCEPTORS AND SEPARATORS

IPC SECTION 1003 INTERCEPTORS AND SEPARATORS

**IPC Section 1003.1; changed to read as follows:*

1003.1 Where required. Interceptors and separators shall be provided, as required by applicable local provisions, to prevent the discharge of oil, grease, sand and other substances harmful or hazardous to the *public sewer*, the private sewage disposal system or the sewage treatment plant or processes. In the absence of local provisions, interceptors and separators shall be provided as required in this chapter.

**IPC Section 1003.3.2; changed to read as follows:*

1003.3.2 Food waste disposers. Where food waste disposers connect to grease interceptors, a solids interceptor shall separate the discharge as an integral design of the grease interceptor when required by applicable local provisions, or before connecting to the grease interceptor. Solids interceptors and grease interceptors shall be sized and rated for the discharge of the food waste disposers. Emulsifiers, chemicals, enzymes and bacteria shall not discharge into the food waste grinder.

**IPC Section 1003.3.5.1; changed to read as follows:*

1003.3.5.1 Grease interceptor capacity. Grease interceptors shall have the grease retention capacity as required by applicable local provisions. In the absence of local provisions, the capacity shall be as indicated in Table 1003.3.5.1 for the flow-through rates indicated.

**IPC Section 1003.4; change the exception to read as follows:*

Exception: For oil separators in elevator pits, see Section 317.

CHAPTER 11 – STORM DRAINAGE

IPC SECTION 1101 GENERAL

**IPC Section 1101.8; changed to read as follows:*

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

Exceptions:

1. Subsurface drainage system.
2. Cleanouts and manholes as required by Sections 708.3.2 and 708.3.3 are not required when the building storm drainage system is protected from potential water backup from the yard lines by one of the following methods:

- a. The building storm drainage systems connects to the yard storm drainage piping through an air gap; or,
- b. There is some form of relief such as a parking lot inlet or curb inlet in which blocked storm water can discharge before backing up in the building storm drainage system.

**IPC SECTION 1106
SIZE OF CONDUCTORS, LEADERS AND STORM DRAINS**

**IPC Section 1106.1; changed to read as follows:*

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.

CHAPTER 12 – SPECIAL PIPING AND STORAGE SYSTEMS

**IPC SECTION 1201
GENERAL**

**IPC Section 1202.1; delete exception #2.*

(c) The remaining sections of the 2021 *International Fuel Gas Code* are hereby amended as follows:

CHAPTER 2 - DEFINITIONS

**IFGC SECTION 202
DEFINITIONS**

**IFGC Section 202; definitions are changed and new definitions are added to read as follows:*

BUILDING CODE. Building Code shall mean the *International Building Code* as adopted by this jurisdiction.

CHANGE OF OCCUPANCY. A change in the purpose or level of activity within a building that involves a change in application of the requirements of this code. The definition shall also apply to the usage of the surrounding site and access to and from the building, structure or site, as necessary to achieve the purpose of this code, and to obtain compliance with other codes and

ordinances of this jurisdiction.

ELECTRICAL CODE. Electrical Code shall mean the *National Electrical Code* as adopted by this jurisdiction. For the purpose of this code, all references to NFPA 70 shall be assumed to mean the Electrical Code as defined herein.

ENERGY CODE. Energy Code shall mean the *International Conservation Energy Code* as adopted by this jurisdiction.

FIRE PREVENTION CODE (FIRE CODE). Fire Prevention Code, or Fire Code, shall mean the *International Fire Code* as adopted by this jurisdiction.

FORT WORTH BUILDING ADMINISTRATIVE CODE. The Fort Worth Administrative code containing the administrative, organizational, and enforcement rules and regulations for the Fort Worth Building, Residential, Plumbing, Fuel Gas, Mechanical, Electrical, Sign and Existing Building codes.

FUEL GAS CODE. Fuel Gas code shall mean the *International Fuel Gas Code* as adopted by this jurisdiction and shall be considered as part of the Plumbing Code. (See Plumbing Code.)

MECHANICAL CODE. Mechanical Code shall mean the *International Mechanical Code* as adopted by this jurisdiction.

PLUMBING.

For the purpose of using the *International Plumbing Code*, as adopted, shall mean:

The practice, materials and fixtures utilized in the installation, maintenance, extension and alteration of all piping, fixtures, plumbing appliances and plumbing appurtenances, within or adjacent to any structure, in connection with sanitary drainage or storm drainage facilities; venting systems, and public or private water supply systems.

For the purpose of complying with the Texas State Plumbing License Law, shall mean:

All piping, fixtures, appurtenances, and appliances, including disposal systems, drain or waste pipes, or any combination of these that:

supply, recirculate, drain, or eliminate water, gas, medical gasses and vacuum, liquids, and sewage for all personal or domestic purposes in and about buildings where persons live, work, or assemble; connect the building on its outside with the source of water, gas, or other liquid supply, or combinations of these, on the premises, or the water main on public property; and carry waste water or sewage from or within a building to the sewer service lateral on public property or the disposal or septic terminal that holds private or domestic sewage.

The installation, repair, service, maintenance, alteration, or renovation of all piping, fixtures, appurtenances, and appliances on premises where persons live, work, or assemble that supply gas, medical gasses and vacuum, water, liquids, or any combination of these, or dispose of waste water or sewage.

PLUMBING CODE. Plumbing Code shall mean the *International Plumbing Code* and the

International Fuel Gas Code as adopted by this jurisdiction. The term "Plumbing Code" applies to both codes as one combined code.

PLUMBING SYSTEM.

For the purpose of using the *International Plumbing Code*, as adopted, shall mean:

Includes the water supply and distribution pipes; plumbing fixtures and traps; water-treating or water-using equipment; soil, waste and vent pipes; and sanitary and storm sewers and building drains, in addition to their respective connections, devices and appurtenances within a structure or premise.

RESIDENTIAL CODE. Residential Code shall mean the *International Residential Code* as adopted by this jurisdiction.

TECHNICAL CODES. The Fort Worth Building, Residential, Plumbing, Fuel Gas, Mechanical, Electrical, Sign and Existing Building codes which regulate the construction, alteration, relocation, enlargement, replacement, repair, equipment, use and occupancy, location, maintenance, removal and demolition of every building or structure or any appurtenances connected or attached to such buildings or structures.

CHAPTER 3 – GENERAL REGULATIONS

**IFGC SECTION 301
GENERAL**

**IFGC Section 301.16 and 301.17; added to read as follows:*

301.16 Manufactured Home Parks. Gas services at manufactured home parks shall be in accordance with the following:

1. At each lot provided with piped gas the outlet shall be equipped with an approved cutoff when not in use so as to prevent accidental discharge of gas.
2. Liquefied petroleum gas systems may be installed only if an available natural gas system is more than one thousand (1,000) feet from the manufactured home park.

301.17 Recreational Vehicle Parks. Each recreational vehicle park lot provided with piped gas shall have an approved manual shutoff valve installed upstream of the gas outlet. The outlet shall be equipped with an approved cutoff to prevent accidental discharge of gas when the outlet is not in use.

**IFGC SECTION 303
APPLIANCE LOCATION**

*IFGC Section 303.1; add a second paragraph to read as follows:

Access to *equipment* and appliances shall be provided through areas under the control of the tenant, room or dwelling unit served, or provided in common areas accessible without going through private tenant spaces, rooms or dwelling units. The location shall not be such that permission from one occupant must be obtained before another occupant can provide service to their equipment or appliances.

*IFGC Section 303.3; #6 changed to read as follows:

303.3 Prohibited locations. Appliances shall not be located in sleeping rooms, bathrooms, toilet rooms, storage closets or surgical rooms, or in a space that opens only into such rooms or spaces, except where the installation complies with one of the following:

1. *{unchanged}*
2. *{unchanged}*
3. *{unchanged}*
4. *{unchanged}*
5. *{unchanged}*
6. A clothes dryer is installed in a residential bathroom or toilet room having a permanent opening with an area of not less than 100 square inches (0.06 m²) that communicates with a space other than a sleeping room, bathroom, toilet room or storage closet.

IFGC SECTION 305 INSTALLATION

*IFGC Section 305.5; delete.

IFGC SECTION 306 ACCESS AND SERVICE SPACE

*IFGC Section 306.3; changed to read as follows:

306.3 Appliances in attics. Attics containing appliances shall be provided . . . *{bulk of paragraph unchanged}* . . . side of the *appliance*. The clear *access* opening dimensions shall be a minimum of 20 inches by 30 inches (508 mm by 762 mm), or larger where such dimensions are not large enough to allow removal of the largest *appliance*. As a minimum, access to the attic space of residential uses shall be provided by one of the following:

1. A permanent stair.
2. A pull down stair with minimum weight capacity of 300 lbs.
3. An access door from an upper floor level.
4. An access panel, only when the equipment is within 24" of the panel opening and only with prior approval of the code official.

Exceptions:

1. The passageway and level service space are not required where the *appliance* is capable of being serviced and removed through the required opening.

2. Where the passageway is unobstructed and not less than 6 feet (1829 mm) high and 22 inches (559 mm) wide for its entire length, the passageway shall be not greater than 50 feet (15 250 mm) in length.

Solid flooring as specified for the passageway of this section shall be flooring that complies with the provisions as required for a floor or shall not be less than one layer of ¾" plywood.

Water heaters shall not be installed in residential attics.

Exception: Tankless water heaters.

**IFGC Section 306.3.1; add a sentence to read as follows:*

Low voltage wiring of 50 Volts or less shall be installed in a manner to prevent physical damage.

**IFGC Section 306.4; amend exception #2 to read as follows:*

2. Where the passageway is unobstructed and not less than 6 feet (1829 mm) high and 22 inches (559 mm) wide for its entire length, the passageway shall be not limited in length.

**IFGC Section 306.4.1; add a sentence to read as follows:*

Low voltage wiring of 50 Volts or less shall be installed in a manner to prevent physical damage.

**IFGC Section 306.5; changed to read as follows:*

306.5 Equipment and appliances on roofs or elevated structures. Where *equipment* requiring *access* or appliances are located on an elevated structure or the roof of a building such that personnel will have to climb higher than 16 feet (4877 mm) above grade to access such equipment or appliance, an interior or exterior means of access shall be provided. Permanent exterior ladders providing roof *access* need not extend closer than 12 feet (3658 mm) to the finish grade or floor level below and shall extend to the *equipment* or appliances' level service space. Such *access* shall . . . *{bulk of section to read the same}*. . . Where access involves climbing over parapet walls, the height shall be measured to the top of the parapet wall.

Where an equipment or appliance has a serviceable area located at a height exceeding 16 feet (4877 mm) above the access level, a permanent approved means of access and a catwalk or working deck shall be provided on at least one side. Such permanent exterior ladder need not extend closer than 12 feet (2438 mm) to the access level below.

{Remainder of section unchanged}

*IFGC Section 306.5.1.1; added to read as follows:

306.5.1.1 Catwalk. On roofs having slopes greater than 4 in 12, a catwalk at least 24 inches in width with substantial cleats spaced not more than 16 inches apart shall be provided from the roof access to the working platform at the appliance.

*IFGC Section 306.5.2; add a sentence to read as follows:

Low voltage wiring of 50 Volts or less shall be installed in a manner to prevent physical damage.

IFGC SECTION 307 CONDENSATE DISPOSAL

*IFGC Section 307.3; change to read and add a second paragraph to read as follows:

307.3 Drain pipe materials and sizes. Components of the condensate disposal system shall be ABS, cast iron, copper and copper alloy, CPVC, cross-linked polyethylene, galvanized steel, PE-RT, polyethylene, polypropylene, PVC or PVDF pipe or tubing. Components shall be selected for the pressure, temperature and exposure rating of the installation. Joints and connections shall be made in accordance with the applicable provisions of Chapter 7 of the *International Plumbing Code* relative to the material type. Condensate waste and drain line size shall be not less than the discharge size of the pan but not less than ¾-inch (19 mm) pipe size and shall not . . . *{bulk of paragraph unchanged}* . . . in accordance with Table 314.2.2 of the *International Plumbing Code*. All horizontal sections of drain piping shall be installed in uniform alignment at a uniform slope.

CHAPTER 4 – GAS PIPING INSTALLATIONS

IFGC SECTION 401 GENERAL

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

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"

**IFGC SECTION 404
PIPING SYSTEM INSTALLATION**

*IFGC Section 404.7.1; changed to read as follows:

404.7.1 Piping through bored holes or notches. Where the piping is installed through holes or notches in framing members and the piping is located less than 1 ½ inches (38 mm) from the framing member face to which wall, roof, ceiling or floor membranes will be attached, . . . {Remainder of section unchanged}.

*IFGC Section 404.7.2; changed to read as follows:

404.7.2 Piping installed in other locations. Where the piping is located within a framing member and is less than 1 ½ inches (38 mm) from the framing members face to which wall, roof, ceiling or floor membranes will be attached, . . . {Remainder of section unchanged}.

*IFGC Section 404.9; changed to read as follows:

404.9 Above-ground outdoor piping. Aboveground *piping* installed outdoors shall be elevated . . . {bulk of section unchanged} . . . sleeve shall be sealed.

*IFGC Section 404.12; changed to read as follows:

404.12 Minimum burial depth. Underground piping systems, other than LP Gas systems regulated by the Texas Railroad Commission, shall be installed a minimum depth of 18 inches (458 mm) below grade.

*IFGC Section 404.12.1; delete.

**IFGC SECTION 406
INSPECTION, TESTING, AND PURGING**

*IFGC Section 406.1.3; delete.

*IFGC Section 406.4, 406.4.1 and 406.4.2; changed to read as follows:

406.4 Test pressure measurement. Test pressure shall be measured with a diaphragm gauge 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. Gauges shall be calibrated per manufacturer's recommendation or at a minimum of one (1) time

per year, to insure accuracy.

406.4.1 Test pressure. *{no change}*.

406.4.2 Test duration. Test duration shall be held for a length of time satisfactory to the code official, but not less than 15 minutes.

**IFGC Section 406.4.3; added to read as follows:*

406.4.3 Mixed gas piping systems. Welded and non-welded gas piping systems shall not be mixed without the installation of cut-off devices so that each system can be isolated and tested separately as required in this section.

Existing mixed piping systems lawfully in existence at the time of the adoption of this code may remain. Any retesting of such a mixed system shall be at the lower testing pressure required for the piping involved. Such a system shall be so labeled with the operating pressure in a manner as required by the Code Official.

IFGC SECTION 410 FLOW CONTROLS

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

Access to regulators shall comply with the requirements for access to appliances as specified in Section 306.

Exception: A passageway or level service space is not required when the regulator is capable of being serviced and removed through the required attic opening.

CHAPTER 6 – SPECIFIC APPLIANCES

IFGC SECTION 614 CLOTHES DRYER EXHAUST

**IFGC Section 614.9.1; changed to read as follows:*

[M] 614.9.1 Material and Size. Exhaust ducts shall have a smooth interior finish and shall be construed of metal a minimum of 0.016-inch (0.4 mm) in thickness. The exhaust duct size shall be 4 inches (102 mm) nominal in diameter. The size of duct shall not be reduced along its developed length nor at the point of termination.

*IFGC Section 614.9.2; add a sentence to read as follows:

[M] 614.9.2 Duct Installation. Exhaust ducts shall be support at 4-foot (1219 mm) intervals and secured in place. The insert end of the duct shall extend into the adjoining duct or fitting in the direction of airflow. Ducts shall not be joined with screws or similar fasteners that protrude into the inside of the duct. Where dryer exhaust ducts are enclosed in wall or ceiling cavities, such cavities shall allow the installation of the duct without deformation.

IFGC SECTION 621 UNVENTED ROOM HEATERS

*IFGC Section 621.2; changed to read as follows:

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

Exception: Existing approved unvented heaters may continue to be used in dwelling units, in accordance with the code provisions in effect when installed, when approved by the Code Official unless an unsafe condition is determined to exist as described in ~~Section 408.7~~ the Fort Worth Building Administrative Code.

IFGC SECTION 624 WATER HEATERS

*IFGC Section 624.1.1; changed to read as follows:

624.1.1 Installation requirements. The requirements for water heaters relative to *access*, sizing, relief valves, drain pans and scald protection shall be in accordance with the *International Plumbing Code*. Water heaters, other than tankless water heaters, shall not be installed in residential attics.

SECTION 3.

That Section 26-3 of the Code of the City of Fort Worth (2015), as amended, is hereby amended to read as follows:

Sec. 26-3. Effect of Conflict with Other Ordinances.

This chapter shall be cumulative of all provisions of ordinances of the Code of the City of Fort Worth, Texas (2015), affecting Plumbing Code provisions, as amended, and shall not repeal any of the provisions of such ordinances, except in those instances where provisions of such ordinances are in direct conflict with the provisions of this ordinance.

SECTION 4.

That Section 26-4 of the Code of the City of Fort Worth (2015), as amended, is hereby added to read as follows:

Sec. 26-4 Penalty for violation.

Any person, firm, or corporation violating any of the provisions of this ordinance shall be deemed guilty of a misdemeanor and upon conviction thereof shall be punishable by a fine not to exceed Two Thousand Dollars (\$2,000.00) for all violations involving fire safety, or public health and sanitation and shall be fined not more than Five Hundred Dollars (\$500.00) for all other violations of this ordinance. Each day or any portion thereof during which any violation of this ordinance occurs or continues shall be deemed a separate offense and upon conviction thereof shall be punishable as herein provided.

SECTION 5.

This chapter shall be cumulative of all provisions of ordinances of the Code of the City of Fort Worth, Texas (2015), affecting Plumbing Code provisions, as amended, and shall not repeal any of the provisions of such ordinances, except in those instances where provisions of such ordinances are in direct conflict with the provisions of this ordinance.

SECTION 6.

It is hereby declared to be the intention of the City Council that the sections, paragraphs, sentences, clauses, and phrases of this ordinance are severable, and, if any phrase, clause, sentence, paragraph, or section of this ordinance shall be declared void, ineffective, or unconstitutional by the valid judgment or decree of any court of competent jurisdiction, such voidness, ineffectiveness, or unconstitutionality shall not affect any of the remaining phrases, clauses, sentences, paragraphs, and sections of this ordinance, since the same would have been enacted by the City Council without the incorporation in this ordinance of any such void, ineffective, or unconstitutional phrase, clause, sentence, paragraph, or section.

SECTION 7.

Any person, firm, or corporation violating any of the provisions of this ordinance shall be deemed guilty of a misdemeanor and upon conviction thereof shall be punishable by a fine not to exceed Two Thousand Dollars (\$2,000.00) for all violations involving fire safety, or public health and sanitation and shall be fined not more than Five Hundred Dollars (\$500.00) for all other violations of this ordinance. Each day or any portion thereof during which any violation of this ordinance occurs or continues shall be deemed a separate offense and upon conviction thereof shall be punishable as herein provided.

SECTION 8.

All rights and remedies of the City of Fort Worth, Texas are expressly saved as to any and all violations of the previous Plumbing Code, or any other ordinances affecting construction and fire safety, which have accrued at the time of the effective date of this ordinance: and, as to such accrued violations and all pending litigation, both civil and criminal, whether pending in court or not, under such ordinances, same shall not be affected by this ordinance but may be prosecuted until final disposition by the courts.

SECTION 9.

A copy of the 2021 International Plumbing Code and the 2021 International Fuel Gas Code, together with the local amendments contained in this ordinance, shall be filed in the office of the City Secretary for permanent record and inspection.

SECTION 10.

The Development Services Department of the City of Fort Worth, Texas, is hereby authorized to publish this ordinance in pamphlet form for general distribution among the public, and the operative provisions of this ordinance as so published shall be admissible in evidence in all courts without further proof than the production thereof, as provided in Chapter XXV, Section 3, of the Charter of the City of Fort Worth, Texas.

SECTION 11.

The City Secretary of the City of Fort Worth, is hereby directed to publish the caption and Sections 1, 7, 9, 11 and 12 of this ordinance for two (2) days in the official newspaper of the City of Fort Worth, Texas as authorized by Section 2, Chapter XXV of the Charter of the City of Fort Worth, Texas and by Section 52.013 (a) of the Texas Local Government Code.

SECTION 12.

This ordinance shall take effect upon April 1, 2022.

APPROVED AS TO FORM AND LEGALITY:

By: Melinda Ramos
Sr. Assistant City Attorney

Jannette S. Goodall
Jannette S. Goodall (Mar 17, 2022 15:50 CDT)
City Secretary

Adopted: March 8, 2022

Effective: April 1, 2022



City of Fort Worth, Texas

Mayor and Council Communication

DATE: 03/08/22

M&C FILE NUMBER: M&C 22-0141

LOG NAME: 06ADOPT AND AMEND 2021 I-CODES

SUBJECT

(ALL) Adopt Ordinances Adopting and Amending the 2021 Editions of the International Building Code, International Residential Code, International Mechanical Code, International Plumbing Code, International Fuel Gas Code, International Existing Building Code and the Fort Worth Building Administrative Code and Adopt Ordinance Adopting and Amending the 2021 International Fire Code

RECOMMENDATION:

It is recommended that the City Council adopt the attached seven ordinances which include the following:

1. Adoption of the 2021 International Building Code with local amendments as the Building Code of the City of Fort Worth;
2. Adoption of the 2021 International Residential Code with local amendments as the Residential Code of the City of Fort Worth;
3. Adoption of the 2021 International Mechanical Code with local amendments as the Mechanical Code of the City of Fort Worth;
4. Adoption of the 2021 International Plumbing Code and the 2021 International Fuel Gas Code with local amendments as the Plumbing Code of the City of Fort Worth;
5. Adoption of the 2021 International Existing Building Code with local amendments as the Existing Building Code of the City of Fort Worth;
6. Adoption of the Fort Worth Building Administrative Code; and
7. Adoption of the 2021 International Fire Code and local amendments.

DISCUSSION:

The Fire and Development Services Departments have worked to consolidate and coordinate the amendments in their respective Fire and Building Codes into a single action before the City Council. The City of Fort Worth has adopted model codes from the International Code Council (ICC), with local amendments, as the construction codes for the City since 2004. These model codes are reviewed and updated annually through a national code adoption process. Every three years these changes are codified and published for local adoption. Fort Worth has historically adopted newly published Codes every six years, most recently adopting the 2015 Codes in 2016. The 2021 edition of ICC codes are the latest published version offered for adoption. Development Services staff recommends adopting the 2021 International Codes as the construction codes for the City of Fort Worth. The City will retain the 2015 International Energy Conservation Code.

Construction codes change with the development of new products, materials, construction methods, technology and as a result of evaluations of natural and man-made disasters. Adoption of current codes has a positive impact on the City's ISO rating.

The City of Fort Worth local amendments are based on the amendments recommended for regional adoption by the North Central Texas Council of Governments and our local practices. A committee was formed to review the City's local amendments including representatives from the Development Advisory Committee, the Construction Fire Prevention Board of Appeals, the AIA, the Fort Worth Builders Association, and TEXO the Association of General Contractors. The Fort Worth Builders Association, the Greater Fort Worth Association of Realtors, the Development Advisory Committee and the Construction Fire Prevention Board of Appeals have been briefed on the proposed amendments. The Construction and Fire Prevention Board of Appeals recommended approval of the adoption of the Codes on February 10, 2022.

The construction code ordinances will have an effective date of April 1, 2022.

The attached ordinance for the Fire Department reflects transition of the Fort Worth Fire Code to the 2021 International Fire Code (IFC) with Local Amendments. All local amendments recommended for the 2021 IFC have been reviewed by the Fire and Development Services Departments and have met the approval of the Construction and Fire Prevention Board of Appeals for recommended adoption at their public hearing on February 10, 2022.

This action impacts ALL COUNCIL DISTRICTS.

This M&C does not request approval of a contract with a business entity.

A Form 1295 is not required because: This M&C does not request approval of a contract with a business entity.

FISCAL INFORMATION / CERTIFICATION:

The Director of Finance certifies that approval of these recommendations will have no material effect on City funds.

Submitted for City Manager's Office by: Dana Burghdoff 8018

Originating Business Unit Head: D.J. Harrell 8032

Additional Information Contact: Allison Gray 8030