

The International Plumbing Code (IPC) regulates the design and installation of plumbing systems in buildings other than one- and two-family dwellings. This code is designed to protect health and safety by safeguarding the potable water system, providing for effective wastewater disposal, and promoting the efficient use of water resources. The code continues to evolve in response to new technology and environmental demands.

# SIGNIFICANT CODE CHANGES:

- The minimum number of plumbing fixtures may be based on the actual use of a building, rather than going strictly by the whole building's occupancy classification. [403.1]
- Small spaces intended for quick transactions, such as drop-off, pick-up, or take-out, are not required to have a public toilet facility. [403.3 Exception 2]
- Water temperature limiting devices are required on shampoo sinks and pedicure foot baths. [423.3]
- Replacement water heaters must have a pan, but the pan drain does not need to be piped out, if no drain piping existed previously. [504.7.2]
- The allowable lead content of pipes, fittings, and fixtures carrying potable water has been reduced to 0.25 percent. [605.2.1]
- > The pipe-bursting method of replacing building sewer pipes is addressed. [717]
- Multiple options are given for trap seal protection. [1002.4 & 1002.4.1]

# **CHANGES IN PROPOSED AMENDMENTS:**

Drinking fountains are not required for an occupant load of 20 or less (code says 15 or less). [410.2]

Section 1003.3.1 Grease Interceptors and Automatic Grease Removal Devices has been substantially rewritten to set more specific sizing standards for our jurisdiction.

#### AN ORDINANCE OF THE CITY OF COPPELL, TEXAS

#### ORDINANCE NO.\_\_\_\_\_

AN ORDINANCE OF THE CITY OF COPPELL, TEXAS AMENDING THE CODE OF ORDINANCES BY AMENDING CHAPTER 15 ARTICLE 15-4, "PLUMBING CODE", TO ADOPT THE INTERNATIONAL PLUMBING CODE, 2015 EDITION, AS THE CITY OF COPPELL PLUMBING CODE; PROVIDING AMENDMENTS TO THE INTERNATIONAL PLUMBING CODE 2015 EDITION; PROVIDING A SEVERABILITY CLAUSE; PROVIDING A REPEALING CLAUSE; PROVIDING A SAVINGS CLAUSE; PROVIDING A PENALTY FOR VIOLATION OF THIS ORDINANCE NOT TO EXCEED THE SUM OF FIVE HUNDRED DOLLARS (\$500.00) FOR EACH OFFENSE; EXCEPT HOWEVER, WHERE A DIFFERENT PENALTY HAS BEEN ESTABLISHED BY STATE LAW FOR SUCH OFFENSE WHICH IS A VIOLATION OF ANY PROVISION OF LAW THAT GOVERNS FIRE SAFETY, ZONING, OR PUBLIC HEALTH AND SANITATION, INCLUDING DUMPING OF REFUSE, THE PENALTY SHALL BE A FINE NOT TO EXCEED THE SUM OF TWO THOUSAND DOLLARS (\$2,000.00) FOR EACH OFFENSE; AND PROVIDING AN EFFECTIVE DATE.

# NOW THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF COPPELL, TEXAS:

**SECTION 1.** That the Code of Ordinances of the City of Coppell, Texas be, and the

same is, hereby amended by amending Chapter 15, Article 15-4 in part to adopt the International

Plumbing Code, 2015 Edition, with amendments to read as follows:

#### **"ARTICLE 15-4. PLUMBING CODE**

#### Sec. 15-4 International Plumbing Code – Adopted.

There is hereby adopted the International Plumbing Code, 2015 Edition, and made a part hereof for all purposes, the same as if fully copied in full herein, with the exception of such sections hereof, which are hereafter deleted, modified or amended.

#### Sec. 15-4-2. Amendments.

The following sections of the International Plumbing Code, 2015 Edition, are hereby amended to read as follows:

## 1. Amend Table of Contents, Chapter 7, Section 714, to read as follows:

## 2. Amend Section 102.8, to read as follows:

**102.8 Referenced Codes and Standards.** The codes and standards referenced in this code shall be those that are listed in Chapter 15 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. 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 (NEC) shall mean the Electrical Code as adopted.

## 3. Amend Sections 106.6.2 and 106.6.3, to read as follows:

**106.6.2 Fee Schedule.** The fees for all plumbing work shall be as adopted by resolution of the governing body of the jurisdiction.

**106.6.3 Fee Refunds.** The code official shall establish a policy for authorizing the refunding of fees. (Delete balance of section).

## 4. Adopt a new Section 305.6.1, to read as follows:

**305.6.1 Sewer Depth.** Building sewers shall be a minimum of 12 inches (304 mm) below grade.

5. Amend Section 305.7, to read as follows:

**305.7 Protection of Components of Plumbing System.** Components of a plumbing system installed within 3 feet along 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.

## 6. Amend Sections 312.10.1 and 312.10.2, 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. The property owner is responsible to insure that testing is being performed.

**312.10.2 Testing.** Reduced pressure principle backflow preventer assemblies, double check-valve assemblies, double detector-check valve assemblies and pressure vacuum breaker assemblies 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. The property owner is responsible to ensure that testing is done in accordance with one of the following standards: (list of standards unchanged)

## 7. Amend the second sentence of Section 314.2.1, 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. Condensate shall not discharge in a publicly exposed area such as onto a street, alley, rooftop or sidewalk or other areas so as to cause a public nuisance.

#### 8. Amend Section 314.2.2 to read as follows:

**314.2.2 Drain pipe materials and sizes.** Components of the condensate disposal system shall be cast iron, galvanized steel, copper, cross-linked polyethylene, polyethylene, ABS, CPVC, or schedule 80 PVC pipe or tubing when exposed to ultra violet light. All components shall be selected for the pressure, and 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 not be less than <sup>3</sup>/<sub>4</sub>-inch (19 mm) internal diameter 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.

## 9. Amend Section 401.1 by adding a sentence to read as follows:

**401.1 Scope.** This chapter shall govern the materials, design and installation of plumbing fixtures, faucets and fixture fittings in accordance with the type of occupancy, and shall provide for the minimum number of fixtures for various types of occupancies. The provisions of this Chapter coordinate with the provisions of the Building Code. Should any conflicts arise between the two chapters, the Code Official shall determine which provision applies.

## 10. Amend table 403.1 to read as follows:

#8 Storage; water closets and lavatories 1 per 200.

## 11. Amend Section 403.2 exception 2 to read as follows:

2. Separate facilities shall not be required in structures or tenant space with a total occupant load, including both employees and customers, of 20 or less.

## 12. Amend Section 409.2, to read as follows:

**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.

## 13. Amend Section 410.2, to read as follows:

- **410.2 Small occupancies.** Drinking fountains shall not be required for an occupant load of 20 or fewer.
- 14. Amend Section 412.4, to read as follows:

**412.4 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 (76 mm) in diameter.

2. Commercial kitchens. In lieu of floor drains in commercial kitchens, the code official may accept floor sinks.

3. Public restrooms.

## **15.** Amend Section 419.3, to read as follows:

**419.3 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.

## 16. Amend Section 502.3 to read as follows:

**502.3 Appliances 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 not less than 20 inches by 30 inches (508 mm by 762 mm), where such dimensions are large enough to allow removal of the water heater. A walkway to an appliance shall be rated as a floor as approved by the building official. As a minimum, for access to the attic space, provide one of the following:

- 1. A permanent stair.
- 2. A pull down stair with a minimum 300 lb (136 kg) capacity.
- 3. An access door from an upper floor level.
- 4. Access Panel may be used in lieu of items 1, 2, and 3 with prior approval of the code official due to building conditions.

## 17. Adopt a new Section 502.6 and 502.6.1 to read as follows:

**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 (2438 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) is capable of being accessed through a lay-in ceiling and a water heater is installed is not more than ten (10) feet (3048 mm) above the ground or floor level and may be reached with a portable ladder.

**502.6.1 Illumination and convenience outlet**. 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 502.1.

#### 18. Amend Section 504.6, 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. 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 manufacture's installation instructions and installed according to those instructions.

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

- 6. Discharge in a manner that does not cause personal injury or structural damage.
- 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 no 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 constructed of PEX or PE-RT tubing. The outlet end of such tubing shall be fastened in place.

#### 19. Amend Section 504.7.1 to read as follows:

Section 504.7.1 Pan size and drain to read as follows: The pan shall be not less than 11/2 inches (38 mm) in depth and shall be of sufficient size and shape to receive all dripping or condensate from the tank or water heater. The pan shall be drained by an indirect waste pipe having a diameter of not less than 3/4 inch (19 mm). Piping for safety pan drains shall be of those materials listed in Table 605.4. Multiple pan drains may terminate to a single discharge piping system when approved by the administrative authority and permitted by the manufactures installation instructions and installed with those instructions.

#### 20. Amend Section 604.4.1 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.

#### 21. Section 606.1, items #4 and #5 shall be deleted.

22. Amend Section 606.2, to read as follows:

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.

## 23. Amend Section 608.1, 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 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 608.16.10.

## 24. Amend Section 608.16.5, to read as follows:

**608.16.5 Connections to Lawn Irrigation Systems.** The potable water supply to lawn irrigation systems shall be protected against backflow by an atmospheric-type vacuum breaker, a pressure-type vacuum breaker, a double-check assembly or a reduced pressure principle backflow preventer. A valve shall not be installed downstream from an atmospheric vacuum breaker. Where chemicals are introduced into the system, the potable water supply shall be protected against backflow preventer.

## 25. Amend Section 608.17, to read as follows:

**608.17 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 608.17.1 through 608.17.8.

## 26. Amend Section 610.1, to read as follows:

**610.1 General.** New or repaired potable water systems shall be purged of deleterious matter and disinfected prior to utilization. The method to be followed shall be that prescribed by the health authority or water purveyor having jurisdiction or, in the absence of a prescribed method, the procedure described in either AWWA C651 or AWWA C652, or as described in

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this section. This requirement shall apply to "on-site" or "in-plant" fabrication of a system or to a modular portion of a system.

- 1. The pipe system shall be flushed with clean, potable water until dirty water does not appear at the points of outlet.
- 2. The system or part thereof shall be filled with a water/chlorine solution containing at least 50 parts per million (50 mg/L) of chlorine, and the system or part thereof shall be valved off and allowed to stand for 24 hours; or the system or part thereof shall be filled with a water/chlorine solution containing at least 200 parts per million (200 mg/L) of chlorine and allowed to stand for 3 hours.
- 3. Following the required standing time, the system shall be flushed with clean potable water until the chlorine is purged from the system.
- 4. The procedure shall be repeated where shown by a bacteriological examination that contamination remains present in the system.

Exception: With prior approval the Code Official may wave this requirement when deemed un-necessary.

#### 27. Delete Section 703.6 in its entirety.

#### 28. Section 705.11.2; delete Exceptions.

#### 29. Amend Section 712 to read as follows:

**712.3.3.1 Materials**. Pipe and fitting materials shall be constructed of brass, copper, CPVC, ductile iron, stainless steel, galvanized iron, PE, or PVC.

#### **30.** Adopt a new Section 712.5 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 sumps and pumping systems, see Section 1113.

## **31. Amend Section 714 and 714.1, to read as follows:**

SECTION 714

## ENGINEERED DRAINAGE DESIGN

**714.1 Design of Drainage System.** The sizing, design and layout of the drainage system shall be permitted to be designed by a registered engineer using approved design methods.

#### 32. Amend Section 802.3.3 by adding a sentence to read as follows:

**802.3.3 Standpipes.** Standpipes shall be individually trapped. Standpipes shall extend a minimum of 18 inches (457 mm) and a maximum of 42 inches (1066 mm) above the trap weir. Access shall be provided to all standpipes and drains for rodding. No standpipe shall be installed below the ground.

## **33.** Adopt a new Section 804.2 to read as follows:

**804.2 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.

#### 34. Amend Section 903.1, to read as follows:

**903.1 Roof Extension.** All open vent pipes that extend through a roof shall be terminated at least six (6) inches (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 (2134 mm) above the roof.

## 35. Delete Section 917 in its entirety.

36. Delete Section 1002.10 in its entirety.

#### 37. Amend Sections 1003.3.1 and 1003.3.1.1, to read as follows:

**1003.3.1 Grease Interceptors and Automatic Grease Removal Devices required.** All food establishments having a food waste disposal or a discharge of more than 50 gallons per minute shall discharge into a grease interceptor of at least 750-gallon capacity. Establishments with a discharge of 50 gallons per minute or less shall discharge into at least a 100-lb. size grease trap. An approved grease trap or interceptor complying with the provisions of this section shall be installed in the waste line leading from sinks, drains and other fixtures or equipment in

establishments such as restaurants, cafes, lunch counters, cafeterias, bars and clubs, hotel, hospital, factory or school kitchen, or other establishments where grease may be introduced into the drainage or sewage system in quantities that can affect line stoppage or hinder sewage treatment or private disposal.

**1003.3.1.1 Engineered Design**. Interceptors required by Section 1003.3.1, 1003.3.4 and 1003.4.2 shall be designed and sized by a plumbing engineer.

#### 38. Amend Section 1101.8, to read as follows:

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

#### **39.** Amend Section 1106.1, 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 hourly rainfall rate.

#### 40. Amend Section 1108.3, to read as follows:

**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 4 inches (102 mm). The flow through the primary system shall not be considered when sizing the secondary roof drain system."

**SECTION 2.** If any section, subsection, paragraph, sentence, phrase or work in this ordinance, or application thereof to any person or circumstance is held invalid by any court of competent jurisdiction, such holding shall not affect the validity of the remaining portions of this ordinance, and the City Council of the City of Coppell, Texas hereby declares it would have enacted such remaining portions despite any such invalidity.

**SECTION 3.** That the repeal of any ordinance or any portion thereof by the preceding sections shall not affect or impair any act done or right vested or accrued or any proceeding, suit or prosecution had or commenced in any cause before such repeal shall take effect; but every such

act done, or right vested or accrued, or proceedings, suit or prosecution had or commenced shall remain in full force and effect to all intents or purposes as if such ordinance or part thereof so repealed shall remain in force.

**SECTION 4.** That any person, firm or corporation violating any of the provisions of this ordinance or the Code of Ordinances as amended hereby, shall be guilty of a misdemeanor and upon conviction in the Municipal Court of the City of Coppell, Texas, shall be subject to a fine not to exceed the sum of Five Hundred Dollars (\$500.00) for each offense, except where a different penalty has been established by State law for such offense, the penalty shall be that fixed by State law, and for any offense which is a violation of any provision of law that governs fire safety, zoning or public health and sanitation, including dumping of refuse, the penalty shall be fine not to exceed the sum of Two Thousand Dollars (\$2,000.00) for each offense; and each and every day such offense is continued shall constitute a new and separate offense.

**SECTION 5.** That this ordinance shall become effective immediately from and after its passage and the publication of the caption, as the law and charter in such cases provide.

DULY PASSED by the City Council of Coppell, Texas, this the \_\_\_\_\_ day of \_\_\_\_\_, 2017.

## **APPROVED:**

Karen Hunt, MAYOR

## ATTEST:

# CHRISTEL PETTINOS, CITY SECRETARY

**APPROVED AS TO FORM:** 

**ROBERT HAGER, CITY ATTORNEY**