

2018 International Plumbing Code

ORDINANCE NO. 1212

AN ORDINANCE ADOPTING THE INTERNATIONAL PLUMBING CODE, 2018 EDITION, REGULATING THE ERECTION, INSTALLATION, ALTERATION, REPAIRS, RELOCATION, REPLACEMENT, ADDITION TO, USE OR MAINTENANCE OF PLUMBING SYSTEM IN THE CITY OF SOUTHLAKE; PROVIDING FOR THE ADOPTION OF LOCAL AMENDMENTS THERETO; PROVIDING FOR RECORDING OF SUCH CODE AS A PUBLIC RECORD; PROVIDING THAT THIS ORDINANCE SHALL BE CUMULATIVE OF ALL ORDINANCES; PROVIDING A SEVERABILITY CLAUSE; PROVIDING A SAVINGS CLAUSE; PROVIDING FOR PUBLICATION IN PAMPHLET FORM; PROVIDING FOR PUBLICATION IN THE OFFICIAL NEWSPAPER; AND PROVIDING AN EFFECTIVE DATE.

WHEREAS, The City of Southlake, Texas is a home rule city acting under its charter adopted by the electorate pursuant to Article XI, Section 5 of the Texas Constitution and Chapter 9 of the Local Government Code; and

WHEREAS, City Council of the City of Southlake deems it necessary to adopt this ordinance governing requirements for the installation and maintenance of plumbing systems including requirements for materials, in order to protect the health, safety and welfare of the citizens of the City of Southlake.

WHEREAS, beginning in the spring of 2018, NCTCOG's Regional Codes Coordinating Committee (RCCC) and its five advisory boards conducted open review meetings over a 1-year period to review the 2018 editions of the International Codes and to develop regional amendments. Their review and recommendations were completed and endorsed by NCTCOG's Executive Board on September 27, 2018. Now NCTCOG encourages jurisdictions in North Central Texas to adopt the 2018 International Building Code along with its respective regional amendments.

**NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF
SOUTHLAKE, TEXAS:**

**Section 1
Adoption**

That the International Plumbing Code, 2018 Edition, published by the International Code Council, is hereby adopted as the Plumbing Code of the City of Southlake, except for plumbing systems otherwise regulated under the International Residential Code for One- and Two- Family Dwellings as adopted. A True and correct copy of this document is referenced in Exhibit "A."

**Section 2
Amendments**

That the 2018 International Plumbing Code, as adopted herein, is hereby amended as provided in Exhibit "B" incorporated herein and attached hereto for all purposes of this ordinance. The City of Southlake may from time to time determine that additional local modifications to the 2018 International Plumbing Code are necessary and appropriate to meet the unique construction needs of the City of Southlake. To effectuate these modifications, the City council shall enact individual ordinances amending this ordinance fully setting forth the change to be made in the code. The amendments shall be consolidated as Exhibit "B" to this ordinance.

**Section 3
Recording**

The material contained in Exhibits "A" and "B" to this ordinance shall not be included in the formal municipal codification of ordinances, but shall be maintained as a public record in the office of the City Secretary and/or the office of Building Inspections and will be available for public inspection and copying during regular business hours.

**Section 4
Cumulative Clause**

This ordinance shall be cumulative of all provisions of ordinances of the City of Southlake, Texas, except where the provisions of this ordinance are in direct conflict with the provisions of such ordinances, in which event the conflicting provisions of such ordinances are hereby repealed.

**Section 5
Severability**

It is hereby declared to be the intention of the City Council that the phrases, clauses, sentences, paragraphs and sections of this ordinance are severable, and if any phrase, clause, sentence, paragraph or section of this ordinance shall be declared unconstitutional by the valid judgment or decree of any court of competent jurisdiction,

such 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 unconstitutional phrase, clause, sentence, paragraph or section. It is not the intention of this ordinance to conflict in any way with the Plumbing License Law of Texas.

Section 6
Penalty

Any person, firm or corporation who violates, disobeys, omits, neglects or refuses to comply with or who resists the enforcement of any of the provisions of this ordinance shall be fined not more than Two Thousand Dollars (\$2,000.00) for all violations involving zoning, fire safety or public health and sanitation, including dumping or refuse, and shall be fined not more than five hundred dollars (\$500) for all other violations of this ordinance. Each day that a violation is permitted to exist shall constitute a separate offense.

Section 7
Saving Clause

All rights and remedies of the City of Southlake are expressly saved as to any and all violations of the provisions of any ordinances affecting the installation and maintenance of plumbing systems 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 8
Publication

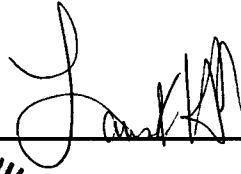
The City Secretary of the City of Southlake is hereby authorized to publish this ordinance in book or pamphlet form for general distribution among the public, and the operative provisions of this ordinance as so published shall be admissible in evidence in all courts without further proof than the production thereof.

The City Secretary of the City of Southlake is hereby directed to publish in the official newspaper of the City of Southlake, the caption, penalty clause, publication clause and effective date of this ordinance one time within ten days after passage of this ordinance, as required by Section 3.13 of the Charter of the City of Southlake.

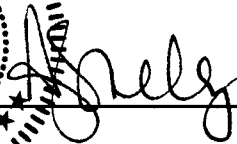
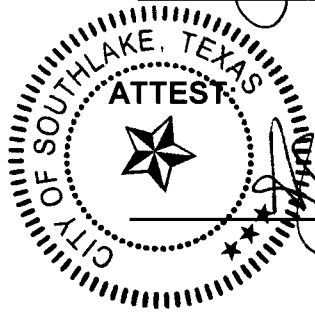
Section 10
Effective Date

This ordinance shall be in full force and effect from and after its passage and publication as required by law but not before May 1, 2019.

APPROVED ON FIRST READING THIS 2 DAY OF APRIL, 2019.

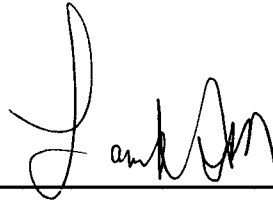


MAYOR

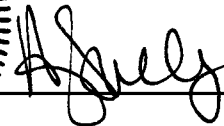
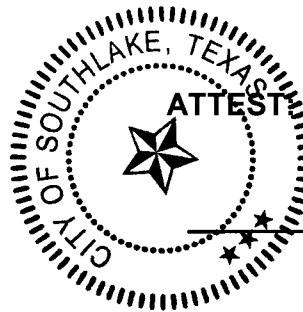


CITY SECRETARY

APPROVED ON SECOND READING THIS 16 DAY OF APRIL, 2019.



MAYOR



CITY SECRETARY

APPROVED AS TO FORM AND LEGALITY:



CITY ATTORNEY

PUBLISHED: 4/2/19

EFFECTIVE: 4/2/19

EXHIBIT A

2018 International Plumbing Code Complete Edition

Located in the Building Inspections Office
1400 Main St., Suite 250
City of Southlake, Texas
76092

EXHIBIT B

Amendments to the 2018 International Plumbing Code

The following sections, paragraphs, and sentences of the *2018 International Plumbing Code* are hereby amended as follows: Standard type is text from the IPC. Underlined type is text inserted. ~~Lined through type is deleted text from the IPC.~~ A double asterisk (**) at the beginning of a section identifies an amendment carried over from the 2015 edition of the code and a triple asterisk (***) identifies a new or revised amendment with the 2018 code.

****Table of Contents, Chapter 7, Section 714; change to read as follows:**

714 Engineered ~~Computerized~~-Drainage Design 69

(Reason: Editorial change to make compatible with amendment to Section 714.1.)

*****Section 102.8; amend and add to read as follows:**

[A]102.8 Referenced codes and standards. The codes and standards referenced in this code shall be those that are listed in Chapter 15 and such codes, when specifically adopted, and standards shall be considered as part of the requirements of this code ... *{Remainder Text unchanged}*

[A]102.8.3 Local amendments. Whenever amendments have been adopted to the referenced codes and standards, each reference to said code and standard shall be considered to reference the adopted amendments. Any reference to NFPA 70 or the *National Electrical Code (NEC)* shall mean the Electrical Code as adopted.

(Reason: Legal wording to recognize locally adopted codes and amendments adopted with referenced codes.)

****Sections 106.5.2 and 106.5.3; amend to read as follows:**

[A]106.6.2 Fee schedule. The fees for all mechanical work shall be as indicated ~~in the following schedule: (JURISDICTION TO INSERT APPROPRIATE SCHEDULE)~~ adopted by resolution of the governing body of the jurisdiction.

[A]106.6.3 Fee Refunds. The code official shall establish a policy for ~~authorize~~ authorizing the refunding of fees ~~as follows.~~ *{Delete balance of section}*

(Reason: This calls to attention of local jurisdictions considering adoption that they need a fee schedule and a refund policy.)

****Section 109; delete entire section and insert the following:**

SECTION 109
MEANS OF APPEAL

[A]109.1 Application for appeal. Any person shall have the right to appeal a decision of the code official to the board of appeals established by ordinance. The board shall be governed by the enabling ordinance.

(Reason: Most jurisdictions already have an ordinance establishing and governing an appeals board for this code. This also calls to the attention of jurisdictions not having such a board that it needs to be established.)

*****Section 305; change 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 approved material plastic. 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.

(Reason: Allows for other materials to be accepted. Corresponds with IRC P2303.3)

****Section 305.4.1; change to read as follows:**

305.4.1 Sewer depth. ~~Building sewers that connect to private sewage disposal systems shall be a minimum of [number] inches (mm) below finished grade at the point of septic tank connection.~~ Building sewers shall be a minimum of 12 inches (304 mm) below grade.

(Reason: Provides sewer depth that is common in this region. Deleted reference to private sewage disposal because a private sewage disposal code is not typically adopted in this region. Corresponds with IRC P263.5.1)

****Section 305.7; change 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 could be exposed to damage shall be recessed into the wall or otherwise protected in an *approved* manner.

(Reason: Provide a common cutoff point to designate a general separation distance at which plumbing systems should be safe for consistency in enforcement.)

*****Section 306; change to read as follows:**

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

(Reason: To follow manufacturer backfill requirements and to be clear to Inspectors out in the field)

****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. ... {text unchanged} ... Condensate shall not discharge into a street, alley, sidewalk, rooftop, or other areas so as to cause a nuisance.

(Reason: Greater specificity in prohibited locations for condensate discharge. It is the intent of this amendment to send condensate discharge into a sanitary sewer drain. Consistent with regional amendment to IMC 307.2.1.)

****Section 314.2.3; Auxiliary and secondary drain systems. Amend 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 overflow drain line shall connect to the drain pan at a higher level than the primary drain connection. However, the conspicuous point shall not create a hazard such as dripping over a walking surface or other areas so as to create a nuisance.

(Reason: Greater specificity in prohibited locations for condensate discharge. Consistent with regional amendment to IMC 307.2.1.)

****Section 409.2; change 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. {Remainder of section unchanged}

(Reason: Domestic dishwashing machines would be difficult to enforce and should already come equipped with backflow preventers. Consistent with regional amendments in IPC Section 608.)

****Section 410.2; change to read as follows:**

410.2 Small occupancies. Drinking fountains shall not be required for an occupant load of ~~15~~ 25 or fewer and for dining and/or drinking establishments.

(Reason: To match regional amendments in IBC Table 2902.1 footnote g.)

****Section 413.4; change to read as follows:**

413.4 Required location for floor drains ~~Public laundries and central washing facilities.~~ 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.

(Reason: To make more compatible with local health code practices.)

*****Section 502.3; change to read as follows:**

502.3 Water heaters installed in attics. Attics containing a water heater shall be provided . . . {bulk of paragraph unchanged} . . . 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.

(Reason: To provide a safe means of accessibility to appliances in attics and to allow for different types of construction limitations. Consistent with regional amendment to IMC 306.3 and IFGC 306.3)

****Section 502; add Section 502.6 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.

(Reason: To provide safe access to water heaters. Consistent with regional amendments to IFGC 306.7 and IMC 306.6. Note reference to amendment above.)

****Section 504.6; amend 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. ~~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 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 manufactures installation instructions and installed with those instructions.

5. Discharge to the floor, to the pan serving the water heater or storage tank, to a waste receptor an approved location or to the outdoors.

{remainder unchanged}

(Reason: To provide a higher degree of safety. Corresponds with IRC P2804.6.1)

*****Section 504.7.1; change to read as follows:**

Section 504.7.1 Pan size and drain. The pan shall be not less than 1 ½ 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. {existing text unchanged}

(Reason: Regionally accepted practice. Corresponds with IRC P2801.6.1)

****Section 608.1; amend 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, except and as specifically stated in Sections 608.2 through 608.16.10.

(Reason: To recognize local requirements.)

****Section 608.17.5; change 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-type vacuum breaker, a pressure-type vacuum breaker, a double-check assembly or a reduced pressure principle backflow prevention assembly. {remainder unchanged}

(Reason: To recognize regional practices. Corresponds with IRC P2902.5.3)

****Section 608.18; change 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. Installation shall be in accordance with Sections 608.17.1 through 608.17.8.

(Reason: To allow local requirements to govern.)

Section 703.6; Delete

(Reason: not a standard practice in this region)

*****Section 704.5; add to read as follows:**

704.5 Single stack fittings. Single stack fittings with internal baffle, PVC schedule 40 or cast iron single stack shall be designed by a registered engineer and comply to a national recognized standard.

(Reason: to allow owners, installers, inspectors, and design professionals to readily identify product markers to determine they meet all required standards.)

*****Section 705.10.2; delete exceptions as follows:**

705.10.2. Solvent cementing. Joint surfaces shall be clean and free from moisture. A purple primer that conforms to ASTM F 656 shall be applied. Solvent cement not purple in color and conforming to ASTM D 2564, CSA B137.3, CSA B181.2 or CSA B182.1 shall be applied to all joint surfaces. The joint shall be made while the cement is wet and shall be in accordance with ASTM D 2855. Solvent cement joints shall be permitted above or below ground

Exception: A primer is not required where all of the following conditions apply:

- ~~1. The solvent cement used is third-party certified as conforming to ASTM D-2564~~
- ~~2. The solvent cement is used only for joining PVC drain, waste, and vent pipe and fittings in not pressure applications in sizes up to and including 4 inches (102mm) in diameter.~~

(Reasoning: to keep the process of joining PVC pipe. Corresponds to IRC P3003.9.2)

****Section 712.5; add 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.

(Reason: To address dual pump system. To provide reference for storm drainage systems.)

****Section 713, 713.1; amend to read as follows:**

SECTION 713 ENGINEERED COMPUTERIZED DRAINAGE DESIGN

713.1 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 computer design methods.

(Reason: Code was too restrictive.)

*****Section 803.3; add to read as follows:**

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

(Reason): To clarify the allowable materials which are specifically listed for chemical drainage applications.

****Section 903.1; change to read as follows:**

903.1 Roof extension. Open vent pipes that extend through a roof shall terminate not less than six (6) inches (152 mm) above the roof. Where a roof is to be used for assembly or as a promenade, observation deck, sunbathing deck or similar purposes, open vent pipes shall terminate not less than 7 feet (2134 mm) above the roof.

(Reason: To provide regional guideline on standard installation method for this area and address section number correction.)

****Section 916.2; delete and replace to read as follows:**

916.2 Installation. Traps for island sinks and similar equipment shall be roughed in above the floor and may be vented by extending the vent as high as possible, but not less than the drainboard height and then returning it downward and connecting it to the horizontal sink drain immediately downstream from the vertical fixture drain. The return vent shall be connected to the horizontal drain through a wye-branch fitting and shall, in addition, be provided with a foot vent taken off the vertical fixture vent by means of a wye-branch immediately below the floor and extending to the nearest partition and then through the roof to the open air or may be connected to other vents at a point not less than six (6) inches (152 mm) above the flood level rim of the fixtures served. Drainage fittings shall be used on all parts of the vent below the floor level and a minimum slope of one-quarter (1/4) inch per foot (20.9 mm/m) back to the drain shall be maintained. The return bend used under the drain-board shall be a one (1) piece fitting or an assembly of a forty-five (45) degree (0.79 radius), a ninety (90) degree (1.6 radius) and a forty-five (45) degree (0.79 radius) elbow in the order named. Pipe sizing shall be as elsewhere required in this Code. The island sink drain, upstream of the return vent, shall serve no other fixtures. An accessible cleanout shall be installed in the vertical portion of the foot vent.

(Reason: To clarify the installation of island venting and to provide a regional guideline on a standard installation method for this region. Corresponds with IRC P3112.2)

****Section 1003; Interceptors and Separators; delete 1003.1 through 1003.10 and add:**

The installation, maintenance, and recordkeeping of grease interceptors and separators shall be in accordance with the City of Southlake Fats, Oils, and Grease (FOG) Manual and Policy.

(Reason: meets the Public Works policy)

****Section 1006.1; change 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 the 100-year hourly rainfall rate indicated in Figure 1106.1 or on other rainfall rates determined from approved local weather data.

(Reason: Specify the roof drain size normally used in the area.)

****Section 1108.3; change to read as follows:**

1108.3 Sizing of secondary drains. Secondary (emergency) roof drain systems shall be sized in accordance with Section 1106 based on the rainfall rate for which the primary system is sized in Figure 1106.1 or on other rainfall rates determined from approved local weather data. 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.

(Reason: Specify that overflow drainage is to be the same size as the normal roof drains.)

****Section 1109; Delete this section. Combined Sanitary and storm public sewer**

****Section 1202.1; delete Exception 1 and 2.**

(Reason: State law already specifies that vacuum systems must comply with NFPA 99.)

END