Editor's Note: This document contains those amendments adopted by the City of Oklahoma City and the State of Oklahoma regarding the 2018 International Plumbing Code (IPC). Those sections shown in RED designate State amendments adopted by the Oklahoma Uniform Building Code Commission. Any questions regarding the intent or interpretation of said State amendments should be referred to the OUBCC.

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AMENDMENTS

2018 INTERNATIONAL PLUMBING CODE®

CHAPTER 1. SCOPE AND ADMINISTRATION

Section 101.1 is deleted in favor of Chapter 42, Section 42-1 of the Oklahoma City Municipal Code, 2020.

Section 101.3 is deleted in favor of Chapter 42, Sections 42-2 of the Oklahoma City Municipal Code, 2020.

Section 102.8 is amended to add the following sentence:

Where The City of Oklahoma City has adopted a specifically referenced code or standard different than those listed, the adopted code shall apply.

Sections 103.1 and 103.2 are deleted in favor of Chapter 42, Sections 42-21 through 42-22 of the Oklahoma City Municipal Code, 2020.

Section 104.1 is deleted in favor of Chapter 42, Section 42.23 of the Oklahoma City Municipal Code, 2020.

Section 104.2 is deleted in favor of Chapter 42, Sections 42-35 through 42-50 of the Oklahoma City Municipal Code, 2020.

Section 104.4 is amended to add the following sentence:

The building official shall comply with the procedures and conditions set forth in the Oklahoma City Municipal Code prior to entry.

Section 104.5 is deleted in favor of Chapter 42, Section 42-29 of the Oklahoma City Municipal Code, 2020.

Section 104.6 is deleted in favor of Chapter 42, Section 42-24 of the Oklahoma City Municipal Code, 2020

Section 104.7 is deleted in favor of Chapter 42, Section 42-30 of the Oklahoma City Municipal Code, 2020.

Section 106 is deleted in favor of Chapter 42, Sections 42-35 through 42-50 and Sections 42-66 through 42-67 of the Oklahoma City Municipal Code, 2020.

Sections 108.4 through Section 108.5 are deleted in favor of Chapter 42, Section 42-25 through 42-30 of the Oklahoma City Municipal Code, 2020.

Section 109 is deleted in favor of Chapter 42, Sections 42-96 through 42-124 of the Oklahoma City Municipal Code, 2020.

CHAPTER 2. DEFINITIONS

BUILDING DRAIN is amended to read as follows:

BUILDING DRAIN. That part of the lowest piping of a drainage system that receives the discharge from soil, waste, and other drainage pipes inside and that extends 5 feet (1524 mm) in developed length of pipe beyond the exterior walls of the building and conveys the drainage to the building sewer.

1. Combined. A building drain that conveys both sewage and storm water or other drainage.
2. Sanitary. A building drain that conveys sewage only.
3. Storm. A building drain that conveys storm water or other drainage, but not sewage.

CHAPTER 3. GENERAL REGULATIONS

Section 305.3 is amended to read as follows:

305.3 Pipes through foundation walls. Any pipe that passes through a foundation wall shall be provided with a relieving arch or pipe sleeve pipe shall be built into the foundation wall. The relieving arch or pipe sleeve shall conform to one of the materials and standards listed in Table 702.2, or as approved. The sleeve shall be two pipe sizes greater than the pipe passing through the wall.

Section 305.4.1 is amended to read as follows:

305.4.1 Sewer depth. Building sewers that connect to private sewage disposal systems shall be a minimum of 12 inches (305 mm) or as approved by the authority having jurisdiction below finished grade at the point of septic tank connection. Building sewers shall be a minimum of 12 inches (305 mm) below grade.

Section 305.6 is amended to read as follows:

305.6 Protection against physical damage. In concealed locations, where piping, other than cast-iron or galvanized steel, is installed through holes or notches in studs, joists, rafters or similar members less than 1 and one-half inches (38 mm) from the nearest edge of the member, the pipe shall be protected by steel shield plates. Such shield plates shall have a thickness of not less than 0.0575 inch (1.463 mm) (No. 16 gage). Such plates shall cover the area of the pipe where the member is notched or bored, and shall extend not less than 2 inches (51 mm) above sole plates and below top plates.

Section 312.2 is amended to read as follows:

312.2 Drainage and vent water test. A water test shall be applied to the drainage system either in its entirety or in sections. If applied to the entire system, all openings in the piping shall be tightly closed, except the highest opening, and the system shall be filled with water to the point of overflow. If the system is tested in sections, each opening shall be tightly plugged except the highest openings of the section under test, and each section shall be filled with water, but no section shall be tested with less than a 5 foot (1524 mm) head of water. In testing successive sections, at least the upper 5 feet (1524 mm) of the next preceding section shall be tested so that no joint or pipe in the building, except the uppermost 5 feet (1524 mm) of the system, shall have been submitted to a test of less than a 5 foot (1524 mm) head of water. This pressure shall be held for at least 15 minutes. The system shall then be tight at all points.

Section 312.3 is amended to read as follows:

312.3 Drainage and vent air test. Plastic piping shall not be tested using air. An air test shall be made by forcing air into the system until there is a uniform gauge pressure of 2.5 psi (17.25 kPa) or sufficient to balance a 5-inch (127 mm) column of mercury. This test shall be held for a period of not less than 15 minutes. Any adjustments to the test pressure required because of changes in ambient temperatures or the seating of gaskets shall be made prior to the beginning of the test period.

Section 312.6 is amended to read as follows:

312.6 Gravity sewer test. Where required, gravity sewer tests shall consist of plugging the end of the building sewer at the point of connection with the public sewer, filling the building sewer with water, testing with not less than a 5 foot (1024 mm) head of water and maintaining such pressure for 15 minutes.

Section 312.10.1 is amended 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, in accordance with Chapter 1, Sections 104.3 and 105.3.2.

Section 314.2.1 is amended to read as follows:

314.2.1 Condensate disposal. Condensate from all cooling coils and evaporators shall be conveyed from the drain pain outlet to an approved place of disposal. Such piping shall maintain a horizontal slope in the direction of discharge of not less than one-eighth unit vertical in 12 units horizontal (1-percent slope). Condensate drains shall be allowed to terminate to an approved pit or French drain consisting of a minimum of 24 inches by 24 inches by 24 inches (610 mm by 610 mm by 610 mm), or equivalent; of 1 inch (25 mm) washed rock. Such pits or French drains shall be located 30 inches (762 mm) minimum from outer edge of foundation to nearest edge of pit or French drain. Condensate shall not discharge into a street, alley or other areas so as to cause a nuisance.

Section 314.2.3.1 is amended to read as follows:

314.2.3.1 Water-level monitoring devices. On down-flow units and all other coils that do not have a secondary drain or provisions to install a secondary or auxiliary drain pan, a water-level monitoring device shall be installed inside the primary drain pan. This device shall shut off the equipment served in the event that the primary drain becomes restricted. Devices installed in the drain line shall not be permitted. Exception: This section shall not apply to appliances installed in areas outside on the ground or elevated structure where condensate overflow will not damage building components or contents.

CHAPTER 4. FIXTURES, FAUCETS AND FIXTURE FITTINGS

Section 403.4.1 is amended to read as follows:

403.4.1 Directional signage. Directional signage indicating the route to the required public toilet facilities in Group A, B, I, M, and R-1 occupancies shall be posted in a lobby, corridor, or aisle, or similar space, such that the sign can be readily seen from the main entrance to the

building or tenant space. Only one sign at each main entrance that is intended for public use shall be required.

Exceptions:

1. Group A occupancies that are part of an overall Group E occupancy need not have directional signage.
2. Private-use Group B occupancies need not have directional signage.

Section 405.9 is amended to read as follows:

405.9 Slip joint connections. Slip joints shall be made with an approved elastomeric gasket and shall only be installed from fixture outlet to within 18 inches (457 mm) downstream of trap outlet seal. Fixtures with concealed slip-joint connections shall be provided with an access panel or utility space at least 12 inches (305 mm) in its smallest dimension or other approved arrangement so as to provide access to the slip joint connections for inspection and repair.

Section 408.2 is amended to read as follows:

408.2 Water connection. The water supply to a bidet shall be protected against backflow by an air gap or backflow preventer in accordance with Section 608.14.1, 608.14.2, 608.14.3, 608.14.5, or 608.14.6.

Section 410.4 is overruled by more stringent language located in Section 1109.5 of the 2018 IBC. (editor's note – this reference is not part of the official resolution adopted by City Council and is added afterwards for clarification.)

Section 412.6.1 is added to read as follows:

412.6.1 Frost-proof sillcocks. All hose connection outlets installed where there is no access to the frost-proof sillcock connection, shall be secured to the structure in an approved manner.

CHAPTER 6. WATER SUPPLY AND DISTRIBUTION

Section 602.3 is amended to read as follows:

602.3 Individual Water Supply. Where a potable public water main is located within 500 feet of a building or premises the water system shall connect to the public main if available. Where a potable public water main is not within 500 feet of the building or premises or if it is not available, an individual source of potable water supply shall be utilized.

Exception: Where approved by the Utilities Department of the City of Oklahoma City.

Section 604.5 is amended to read as follows:

604.5 Size of fixture supply. The minimum size of a fixture supply pipe shall be as shown in Table 604.5. The fixture supply pipe shall terminate not more than 30 inches (762 mm) from the point of connection to the fixture. A reduced size flexible water connector installed between the supply pipe and the fixture shall be of an approved type. The supply pipe shall extend to the floor or wall adjacent to the fixture. The minimum size of individual distribution lines utilized in gridded or parallel water distribution systems shall be as shown in Table 604.5.

Exception: The fixture supply pipe for domestic dishwashers and drinking fountains shall be

permitted to be terminated more than 30 inches (762 mm) from the point of connection to the fixture.

Section 608.15 is amended to read as follows:

608.15 Location of backflow preventers. Access and clearance shall be provided for the required testing, repair and maintenance of all backflow preventers. Access shall be in accordance with the manufacturer's instructions, and there shall not be less than twelve inches of access in 5 directions. An adequate service platform is required for backflow preventers installed over five feet above the floor or grade.

Section 608.16.4 is amended to read as follows:

608.16.4 Protection by a vacuum breaker. Openings and outlets shall be protected by atmospheric-type or pressure-type vacuum breakers. The vacuum breaker has a critical level installation height of not less than 12 inches (305 mm) above the highest elevation of downstream piping and flood level rim of the fixture of device. Fill valves shall be set in accordance with Section 415.3.1. Vacuum breakers shall not be installed under exhaust hoods or similar locations that will contain toxic fumes or vapors. Pipe applied vacuum breakers shall be installed not less than 6 inches (152 mm) above the flood level rim of the fixture, receptor, or device served.

Section 608.17.5 is amended 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 assembly, a spill resistant backflow preventer 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 by a reduced pressure principle backflow preventer assembly.

Section 608.17.7 is amended to read as follows:

608.17.7 Chemical dispenser. Where chemical dispensers connect to the potable water distribution system, the water supply system shall be protected against backflow in accordance with Section 608.14.1, 608.14.2, 608.14.5, 608.14.6 or 608.14.8.

Section 608.17.11 is added to read as follows:

608.17.11 Aquatic Recreation Facilities. Openings and outlets shall be protected by a reduced pressure principle backflow prevention assembly or a reduced pressure principle fire protection backflow prevention assembly on potable water supplies. All Splash Pads, Spray Parks, and similar installations shall have the potable water supply protected by a reduced pressure principle backflow prevention assembly.

CHAPTER 7. SANITARY DRAINAGE

Section 701.2 is amended to read as follows:

701.2 Connection to Sewer Required. Sanitary drainage piping from plumbing fixtures in buildings and sanitary drainage piping systems from premises where public sewer mains are located within 500 feet shall be connected to a public sewer. Where a public sewer is not available the sanitary drainage piping and systems shall be connected to a private sewage disposal system

in compliance with state or local requirements. Where state or local requirements do not exist for private sewage disposal systems, the sanitary drainage piping and systems shall be connected to an approved private sewage disposal system that is in accordance with the International Private Sewage Disposal Code.

Exceptions:

1. Where approved by the Utilities Department of the City of Oklahoma City.
2. Sanitary drainage piping and systems that convey only the discharge from bathtubs, showers, lavatories, clothes washers and laundry trays shall not be required to connect to a public sewer or to a private sewage disposal system provided that the piping or systems are connected to a system in accordance with Chapter 13 or 14 and are approved.

Section 701.5.1 is added to read as follows:

701.5.1 Splash Pads and Spray Parks. All Splash Pads and Spray Park waste receptors shall be trapped and discharge to the sanitary drainage system. The minimum size of any incorporated drainage system piping shall not be less than three inches. A backwater valve with accessible cleanouts shall be installed in Splash Pads and Spray Park drainage service systems.

Section 705.10.1.1.1 is added to read as follows:

705.10.1.1.1 Mechanical joints. Underground mechanical joints using an elastomeric sealing shall have a metallic shield.

Section 705.10.2 is amended to read 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.

Section 708.1.3 is amended to read as follows:

708.1.3 Building drain and building sewer junction. The junction of the building drain and the building sewer shall be served by a cleanout that is located at the junction or within 12 feet (3658 mm) of the developed length of piping upstream of the junction. For the requirements of this section, the removal of the water closet shall not be required to provide cleanout access.

Section 708.1.12 is added to read as follows:

708.1.12 Directional cleanouts. All drainage pipe that exits a structure, shall be provided with cleanouts that serve both directions. All backwater valves and outside interceptors shall have directional cleanouts installed on each side of and in opposing directions away from the equipment.

Section 714.3 is amended to read as follows:

714.3 Location. Backwater valves shall be installed so that access is provided to the working parts. Back water valve shall be a maximum of 18-inches deep above finish grade.

Exception: Extendable type backwater valves.

CHAPTER 8. INDIRECT/SPECIAL WASTE

Section 802.1 is amended to read as follows:

802.1 Where required. Food-handling equipment, in other than dwelling units, clear-water waste, humidifiers, dishwashing machines and utensils, pots, pans and dishwashing sinks shall discharge through an indirect waste pipe as specified in Sections 802.1.1 through 802.1.7. Fixtures not required to be indirectly connected by this section and the exception to Section 301.6 shall be directly connected to the plumbing system in accordance with Chapter 7.

Section 802.1.8 is added to read as follows:

802.1.8 Elevator hoist-way drainage. Each elevator hoistway shall be provided with a sump pump or drain installed in accordance with section 301.6 and shall have the capacity to remove 3000 gallons per hour (50 gallons per minute) (189 liters per minute). Sump pumps shall indirectly discharge to a standpipe that is connected to the sanitary drainage system. The standpipe shall have a diameter of 4 inches minimum.

CHAPTER 9. VENTS

Section 903.1 is amended to read as follows:

903.1 Roof extension. Open vent pipes that extend through a roof shall be terminated not less than 10 inches (254 mm) above the roof. Where a roof is to be used for assembly or as a promenade, observation deck, sunbathing deck or similar purpose, open vent pipes shall terminate not less than 7 feet (2134 mm) above the finished occupiable surface within 10 feet (3048 mm) horizontal distance.

Section 919.1 is amended to read as follows:

919.1 General. Engineered vent systems shall comply with this section and the design, submittal, approval, inspection and testing requirements of Section 316.

CHAPTER 10. TRAPS, INTERCEPTORS AND SEPARATORS

Section 1003.3.7.1 is added to read as follows:

1003.3.7.1 Sizing gravity type interceptors. Gravity type interceptors shall be sized using Table 1003.3.7.1(2) found below. To determine the number of drainage fixture units that will be flowing through the interceptor refer to table 709.1 of the 2018 IPC. Multiple compartment dishwashing sinks shall be sized using the PDI G101 method found at 8.3.2 using a 2-minute drain time. Convert the GPM into DFUs using table 1003.3.7.1(1) found below, however, these DFU values shall not be less than the drainage fixture unit values given for the indirect waste receptor in Table 709.2 of the 2018 IPC After finding the total number of DFUs flowing to the interceptor find the minimum corresponding size using table 1003.3.7.1(2) found below. Gravity interceptors shall be a minimum size of 1000 gallons.

Table 1003.3.7.1(1)

GPM	DFUs
Up to 7 ½	1

Greater than 7 ½ to 15	2
Greater than 15 to 30	4
Greater than 30 to 50	6

Table 1003.3.7.1(2)

DFUs	Interceptor Volume in Gallons
35	1000
90	1250
172	1500
216	2000
307	2500
342	3000
428	4000
576	5000
720	7500
2112	10000
2640	15000

Section 1003.4 is amended to read as follows:

1003.4 Oil separators required. At repair garages where floor or trench drains are provided, car washing facilities, factories where oily and flammable liquid wastes are produced and hydraulic elevator pits, oil separators shall be installed into which oil-bearing, grease-bearing or flammable wastes shall be discharged before emptying into the building drainage system or other point of disposal.

Exceptions:

1. An oil separator is not required in hydraulic elevator pits where an approved alarm system is installed. Such alarm systems shall not terminate the operation of pumps utilized to maintain emergency operation of the elevator by fire fighters.
2. Oil separators shall not be required in a non-hydraulic elevator pit.

Section 1003.10.1 is added to read as follows:

1003.10.1 Sample well. Where an interceptor is installed, a sample-well shall be installed downstream. The sample well shall be located downstream of the interceptor within a reasonable distance and upstream of all other sanitary connections. The sample well shall be a minimum of 6 inches in diameter and shall be approved.

Exception: Where an above ground interceptor is installed, a sample-well shall be installed downstream. The sample well shall be a minimum 2-inch (50.8 mm) test tee.

CHAPTER 11. STORM DRAINAGE

Section 1101.7 is amended to read as follows:

1101.7 Roof design. Roofs shall be designed for the maximum possible depth of water that will pond thereon as determined by the relative levels of roof deck and overflow weirs, scuppers, edges or serviceable drains in combination with the deflected structural elements. In determining the maximum possible depth of water, all primary roof drainage means shall be assumed to be blocked.

The maximum possible depth of water on the roof shall include the height of the water required above the inlet of the secondary roof drainage means to achieve the required flow rate of secondary drainage means to accommodate the design rainfall rate as required by Section 1108.

Section 1101.9 is amended to read as follows:

1101.9 Backwater valves. Storm drainage systems shall be provided with backwater valves as required for sanitary drainage systems in accordance with Section 714.

Table 1108.1 is added to read as follows:

TABLE 1108.1
SIZE OF SECONDARY SCUPPERS FOR A 10.2-INCH PER HOUR RATE OF RAINFALL

Head in inches	Horizontally projected roof areas (square feet) length of weir in inches						
	4	6	8	12	16	20	24
1	112	169	226	339	452	565	678
2	314	471	628	942	1256	1571	1885
3	565	848	1130	1696	2262	2828	3393
4	879	1319	1759	2637	3519	4399	5279

For SI: 1 inch equals 25.4 mm.

Notes:

(i) To adjust this table for other than a 10.2-inch design rain fall rate multiply the square footage on the table by 10.2 then divide by the design rainfall rate.

(ii) This table does not apply to scuppers with a vertical opening height that is less than the head height.

Example: For 4 inches of design rainfall rate, a 4-inch long scupper with a 1-inch head would accommodate 286 square feet. (112 times 10.2) divided by 4 equals 286.

Section 1108.3 is amended to read as follows:

1108.3 Sizing of secondary drains. Secondary (emergency) roof drain systems or scuppers shall be sized in accordance with Section 1108 based on a rainfall rate of 10.2 inches per hour. In sizing secondary roof drain systems using Tables 1106.2, 1106.3 and 1106.6, the Horizontally Projected Roof Area shall be determined by dividing the Horizontally Projected Roof Area for 1-inch rain fall per hour rate by 10.2 inches per hour. 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 or scuppers. Scuppers shall be sized in accordance with Table 1108.1 or by other national methods using the head height of water and flow rate of the scupper.

CHAPTER 13. NONPOTABLE WATER SYSTEMS

Section 1301.9.5 is amended to read as follows:

1301.9.5 Overflow. The storage tank shall be equipped with an overflow pipe having a diameter not less than that shown in Table 606.5.4. The overflow pipe shall be protected from insects or vermin and shall discharge in a manner consistent with storm water runoff requirements of the jurisdiction. The overflow pipe shall discharge at a sufficient distance from the tank to avoid damaging the tank foundation or the adjacent property. Drainage from overflow pipes shall be

directed to prevent freezing on walkways. The overflow drain shall not be equipped with a shutoff valve. A cleanout shall be provided on each overflow pipe in accordance with Section 708.

CHAPTER 15. REFERENCED STANDARDS

ANSI A118.10-99: Specifications for Load Bearing, Bonded, Waterproofed Membranes for Thin Set Ceramic Tile and Dimension Stone Installation. 421.5.2.5, 421.5.2.6. has been added.

TCNA/ANSI A118.10-99: Specifications for Load Bearing, Bonded, Waterproof Membranes for Thin Set Ceramic Tile and Dimension Stone Installation is deleted.

EFFECTIVE this ___1st_____ day of ___March_____ 2024.