

**TITLE 748. OKLAHOMA UNIFORM BUILDING CODE COMMISSION  
CHAPTER 20. ADOPTED CODES**

**SUBCHAPTER 15. IPC® 2015**

**748:20-15-1. Adoption of International Plumbing Code®, 2015 Edition (IPC® 2015)  
[AMENDED AND RENUMBRED TO 748:20-16-1.]**

~~(a) The Oklahoma Uniform Building Code Commission (the "OUBCC") hereby adopts the International Plumbing Code®, 2015 Edition (IPC® 2015) as amended and modified in this subchapter as the statewide minimum code for commercial plumbing construction in the State of Oklahoma pursuant to 59 O.S. 1000.23.~~

~~(b) The OUBCC through formal action expressly chose to adopt the IPC®, 2015 as amended and modified in this subchapter, as the statewide minimum code for commercial plumbing construction in the State of Oklahoma. In like manner, the OUBCC through formal action expressly chose not to adopt the International Plumbing Code®, 2012 Edition (IPC®, 2012) for any purpose.~~

~~(c) This material contains information which is proprietary to and copyrighted by the International Code Council, Inc. The acronym "ICC" and the ICC logo are trademarks and service marks of ICC. ALL RIGHTS RESERVED.~~

**748:20-15-2. Effect of Adoption [AMENDED AND RENUMBERED TO 748:20-16-2.]**

~~The International Plumbing Code®, 2015 Edition (IPC® 2015), as amended and revised by these rules, is hereby established and adopted as the statewide minimum code for commercial plumbing construction in Oklahoma pursuant to 59 O.S. § 1000.23, and may only be amended or altered by other jurisdictions pursuant to Oklahoma law and the administrative rules of the OUBCC as set forth in Title 748, Chapter 15 of the Oklahoma Administrative Code.~~

**748:20-15-3. IPC® 2015 Appendices [AMENDED AND RENUMBRED TO 748:20-16-3.]**

~~(a) None of the appendices of the IPC® 2015 have been adopted by the OUBCC for inclusion in the statewide minimum code for commercial plumbing construction in the State of Oklahoma.~~

~~(b) Appendices A through E are not adopted as the statewide minimum code for commercial plumbing construction within the State of Oklahoma. However, other jurisdictions within the State of Oklahoma may adopt any or all of said appendices in accordance with 59 O.S. § 1000.29.~~

**748:20-15-4. IPC® 2015 Provisions Adopted and Modified [AMENDED AND RENUMBRED TO 748:20-16-4.]**

~~(a) All chapters and provisions within chapters, including exceptions, of the IPC® 2015 not specifically addressed within these rules as being modified, deleted, moved or removed are hereby adopted without modification as the statewide minimum code for commercial plumbing construction within the State of Oklahoma pursuant to 59 O.S. § 1000.23. Chapters and provisions within chapters, including exceptions adopted with modifications are specifically addressed in these rules.~~

~~(b) To the extent any references in the IPC® 2015 as amended and modified in this sub-chapter are made to any other code or standard, the particular edition for that reference is defined in the referenced standards found in the IPC®, 2015 as amended and modified in this sub-chapter and in Chapter 15 entitled "Referenced Standards".~~

**748:20-15-5. Participation in Federal Programs and/or Federally Funded or Financed Projects [RENUMBERED TO 748:20-16-5.]**

~~In order to maximize federal financial aid, assistance, participation, financing and/or funding in any public project(s) and/or federal financial aid, participation, funding for and participation in any federal program(s) by the State of Oklahoma, its agencies, public trusts and instrumentalities, or by any Oklahoma municipalities and other political subdivisions, that receive financial aid, assistance, participation, financing and/or funding for and participate in any federal program(s), the State of Oklahoma, its agencies and instrumentalities, and any Oklahoma municipalities and other political subdivisions, may cooperate with the United States Government and any agency or instrumentality thereof, in the manner authorized and provided by federal law and regulation and in doing so may perform all necessary functions and take all necessary actions for accomplishing such federal purposes and programs, including but not limited to, following and/or complying with federal laws, regulations and/or requirements arising from or related to federal financial aid, assistance, participation, financing and/or funding, in the construction, alteration, movement, enlargement, replacement, repair, equipment, use and occupancy, location, improvement, expansion, operation, maintenance, removal, and demolition of buildings and structures or any appurtenances attached to such buildings or structures, notwithstanding any provisions of any and all uniform building codes and standards adopted by the OUBCC to the contrary.~~

**748:20-15-6. IPC® 2015 Chapter 1 Scope and Administration [AMENDED AND RENUMBERED TO 748:20-16-6.]**

~~Chapter 1 of the Oklahoma adopted IPC® 2015, includes the following Preamble at the very beginning of the chapter:~~

~~(1) Pursuant to 59 O.S. § 1000.23, the OUBCC has adopted the IPC® 2015 as amended and revised by the OUBCC, as the statewide minimum code to be used by all entities for commercial plumbing construction in jurisdictions throughout the State of Oklahoma. However, the OUBCC's adoption of Chapter 1 "Scope and Administration" of the IPC® 2015 is for continuity purposes and the OUBCC's adoption of Chapter 1 recognizes the methods of best practice in fully implementing the statewide minimum code for commercial plumbing construction.~~

~~(2) All provisions of the adopted IPC® 2015 including Chapter 1, as amended and revised by the OUBCC, are hereby established and adopted as the statewide minimum code for commercial plumbing construction in Oklahoma pursuant to 59 O.S. § 1000.23, which may only be amended or altered pursuant to Oklahoma law and the administrative rules of the OUBCC as set forth in Title 748, Chapter 15 of the Oklahoma Administrative Code. However, the provisions of Chapter 1 adopted herein are only intended to be in force and effect to the extent that the respective provisions do not conflict with State law or the lawful exercise of code administration and enforcement jurisdiction by entities empowered to do so pursuant to applicable law.~~

~~(3) Section 106.1.1 Annual permit. This section has been modified to clarify what an annual permit is. This section shall read: An annual permit is a yearly permit which represents a group of individual permits for each alteration to an already approved electrical, gas, mechanical or plumbing installation. The building official is authorized to issue an annual permit upon application therefor to any person, firm or corporation regularly employing one or more qualified tradespersons in the building, structure or on the premises owned or operated by the applicant for the permit.~~

(4) Section 106.1.2 Annual permit records. This section has been modified to require the building official to collect the OUBCC permit fee for each individual permit that is part of the annual permit at the completion of the annual permit term. This section has been modified to read: Annual permit records. The person to whom an annual permit is issued shall keep a detailed record of alterations made under such annual permit. The building official shall have Access to such detailed records of alterations at all times. At the completion of the entity's annual permit term, the applicant shall file such detailed records of alterations with the building official. Pursuant to the authority of 59 O.S. § 1000.25, the building official shall collect fees for each individual permit which is part of the annual permit once the detailed records are submitted and remit such fees to the OUBCC.

(5) The OUBCC adoption of Chapter 1 in this manner is made with the recognition that the legal authority granting state and local code administration and enforcement jurisdictions the power and discretion to administer and enforce codes arises from Oklahoma laws governing those jurisdictions. Furthermore, the OUBCC also recognizes that many state and local code administration and enforcement jurisdictions have already created, or have the lawful authority to create, departments, offices and administrative policies pursuant to various applicable laws and other adopted model codes with "Scope and Administration" provisions similar to Chapter 1 of the adopted IPC® 2015.

(6) This limited adoption of Chapter 1 is made in recognition of the authority and discretion possessed by jurisdictions to administer and enforce building codes. Exercising such authority and jurisdiction in a manner inconsistent with Chapter 1 must be supported by Oklahoma law. Code administration and enforcement jurisdictions shall not use the OUBCC'S limited adoption of Chapter 1 to circumvent the remainder of the requirements established by the Oklahoma adopted IPC® 2015 and the OUBCC will strongly oppose any such practice.

**748:20-15-7. IPC® 2015 Chapter 2 Definitions [AMENDED AND RENUMBERED TO 748:20-16-7.]**

Chapter 2 of the IPC® 2015 is adopted with the following modification: The definition of a building drain has been modified to align with the industry standard where the site sewer (civil) picks up 5 feet outside of the building. This definition has been modified to read: 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.

**748:20-15-8. IPC® 2015 Chapter 3 General Regulations [AMENDED AND RENUMBERED TO 748:20-16-8.]**

Chapter 3 of the IPC® 2015 is adopted with the following modifications:

(1) Section 305.3 Pipes through foundations walls. This section has been modified to require the relieving arch or pipe sleeve pipe to conform with the materials and standards listed in Table 702.2 or as approved by the authority having jurisdiction. This section has been modified to read: 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.

(2) Section 305.4.1 Sewer depth. This section has been modified to include a depth for the septic tank connection unless otherwise approved by the authority having jurisdiction. This section has been modified to read: 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.

(3) Section 312.2 Drainage and vent water test. This section has been modified to change the test from a requirement of a 10 foot (3048 mm) head of water to a requirement of a 5 foot (1524 mm) head of water. This section has been modified to read: 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.

(4) Section 312.3 Drainage and vent air test. This section has been modified to change the equivalent pressure for the inches of mercury to match the feet of water change made for the drainage and vent test. This section has been modified to read: 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.

(5) 312.6 Gravity sewer test. This section has been modified to allow the authority having jurisdiction to determine if this test is required and change the test from a 10 foot (3048 mm) head of water test to a 5 foot (1024 mm) head of water test. This section has been modified to read: 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.

(6) Section 312.10.1 Inspections. This section was modified to allow for third party inspections to be accepted by the code official. This section has been modified to read: 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

**748:20-15-9. IPC® 2015 Chapter 4 Fixtures, Faucets and Fixture Fittings [AMENDED AND RENUMBERED TO 748:20-16-9.]**

Chapter 4 of the IPC® 2015 is adopted with the following modification: Section 405.8 Slip joint connections. This section has been modified to allow the gasket to be installed from the fixture outlet to within 18 inches (457 mm) downstream of the trap outlet seal. It has been modified to read: 405.8 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.

**748:20-15-11. IPC® 2015 Chapter 6 Water Supply and Distribution [AMENDED AND RENUMBERED TO 748:20-16-11.]**

Chapter 6 of the IPC® 2015 is adopted with the following modifications:

(1) ~~Section 604.5 Size of fixture supply. This section has been modified to add an exception to allow domestic dishwashers and drinking fountains to terminate more than 30 inches (762 mm) from the point of connection to the fixture. This section has been modified to read:~~ 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.

(2) ~~Section 608.16.5 Connections to lawn irrigation systems. This section has been modified to add a spill resistant backflow preventer as an option for protection. This section has been modified to read:~~ 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 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.

**748:20-15-12. IPC® 2015 Chapter 7 Sanitary Drainage [AMENDED AND RENUMBERED TO 748:20-16-12.]**

Chapter 7 of the IPC® 2015 is adopted with the following modifications:

(1) ~~Section 705.11.2 Solvent cementing. This section has been modified to delete the exceptions for not using primer under certain conditions. This section has been modified to read:~~ 705.11.2 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.

(2) ~~Section 708.1.3 Building drain and building sewer junction. This section has been modified to change the requirement for the cleanout to be located at the junction or from within 10 feet to within 12 feet of the developed length of piping upstream of the junction. This section has been modified to read:~~ 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.

**748:20-15-14. IPC® 2015 Chapter 9 Vents [AMENDED AND RENUMBERED TO 748:20-16-14.]**

Chapter 9 of the IPC® 2015 is adopted with the following modification: Section 903.1 Roof extension. This section has been modified to specify the number of inches where the open vent pipes that extend through the roof shall be terminated. This section has been modified to read: 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 purposes open vent pipes shall terminate not less than 7 feet (2134 mm) above the finished occupiable surface within 10 feet (3048 mm) horizontal distance.

**748:20-15-15. IPC® 2015 Chapter 10 Traps, Interceptors, and Separators [AMENDED AND RENUMBERED TO 748:20-16-15.]**

Chapter 10 of the IPC® 2015 is adopted with the following modification: Section 1003.4 Oil separators required. This section has been modified to add a second exception to the requirement for installing an oil separator. This section has been modified to read: 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.

**748:20-15-16. IPC® 2015 Chapter 11 Storm Drainage [AMENDED AND RENUMBERED TO 748:20-16-16.]**

Chapter 11 of the IPC® 2015 is adopted with the following modifications:

(1) Section 1101.7 Roof design. This section has been modified to change the section number for the requirement to accommodate the design rate for secondary roof drainage from Section 1106 to Section 1108. This section has been modified to read: 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.

(2) Table 1108.1 Size of secondary scuppers for a 10.2 inch per hour rate of rainfall. This table has been added to the code to provide sizing for secondary scuppers for a 10.2 inch per hour rate of rainfall. The Table shall read as: Table 1108.1 Size of Secondary Scuppers for a 10.2 inch per hour rate of rainfall. A table has been inserted with two columns, both with four

rows beneath. The first column title is "Head in inches" and the second column title is "Horizontally Projected Roof Area (square feet) Length of Weir in inches". The second column should have seven sub-columns labeled 4, 6, 8, 12, 16, 20 and 24.

(A) Below is the "Head in inches" column with the corresponding "Length of Weir in inches" for each of the sub-columns:

(i) Row 1. Head in inches, column is 1, sub-column 4 is 112, sub-column 6 is 169, sub-column 8 is 226, sub-column 12 is 339, sub-column 16 is 452, sub-column 20 is 565, and sub-column 24 is 678.

(ii) Row 2. Head in inches, column is 2, sub-column 4 is 314, sub-column 6 is 471, sub-column 8 is 628, sub-column 12 is 942, sub-column 16 is 1256, sub-column 20 is 1571, and sub-column 24 is 1885.

(iii) Row 3. Head in inches, column is 3, sub-column 4 is 565, sub-column 6 is 848, sub-column 8 is 1130, sub-column 12 is 1696, sub-column 16 is 2262, sub-column 20 is 2828, and sub-column 24 is 3393.

(iv) Row 4. Head in inches, column is 4, sub-column 4 is 879, sub-column 6 is 1319, sub-column 8 is 1759, sub-column 12 is 2637, sub-column 16 is 3519, sub-column 20 is 4399, and sub-column 24 is 5279.

(B) Beneath the column the following should be added: 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.

(3) Section 1108.3 Sizing of secondary drains. This section has been modified to include the use of scuppers or increase the sizing of secondary drains to accommodate rainfalls of 10.2 inches per hour and includes minimum design loads. This section has been modified to read: 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.

#### **748:20-15-16.1. IPC® 2015 Chapter 13 Nonpotable Water Systems [AMENDED AND RENUMBERED TO 748:20-16-18.]**

Chapter 13 of the IPC® is adopted with the following modification: Section 1301.9.6 Overflow. This section has been modified to require the section to apply to any walkway not just those on roofs. This section has been modified to read: 1301.9.6 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.

**748:20-15-17. IPC® 2015 Chapter 15 Referenced Standards [AMENDED AND RENUMBERED TO 748:20-16-20.]**

Chapter 15 of the IPC® 2015 is adopted with the following modifications:

- (1) The reference to the International Building Code® has been modified to include after the title the words "as adopted and modified by the State of Oklahoma through the OUBCC. This section has been modified to read: IBC® 15 International Building Code® as adopted and modified by the State of Oklahoma through the OUBCC.
- (2) The reference to the International Energy Conservation Code® has been modified to change the edition year to 2006. This section has been modified to read: IECC-06 International Energy Conservation Code®.
- (3) The reference to the International Fire Code® has been modified to include after the title the words "as adopted and modified by the State of Oklahoma through the OUBCC." This section has been modified to read: IF® 15 International Fire Code® as adopted and modified by the State of Oklahoma through the OUBCC.
- (4) The reference to the International Fuel Gas Code® has been modified to include after the title the words "as adopted and modified by the State of Oklahoma through the OUBCC." This section has been modified to read: IFGC® 15 International Fuel Gas Code® as adopted and modified by the State of Oklahoma through the OUBCC.
- (5) The reference to the International Mechanical Code® has been modified to include after the title the words "as adopted and modified by the State of Oklahoma through the OUBCC." This section has been modified to read: IMC® 15 International Mechanical Code® as adopted and modified by the State of Oklahoma through the OUBCC.
- (6) The reference to the International Residential Code® has been modified to include after the title the words "as adopted and modified by the State of Oklahoma through the OUBCC." This section has been modified to read: IRC® 15 International Residential Code® as adopted and modified by the State of Oklahoma through the OUBCC.
- (7) The referenced standard for NFPA® 70 National Electrical Code® has been modified to include the words after the title "as adopted and modified by the State of Oklahoma through the OUBCC." This section shall now read: 70-14 National Electrical Code® as adopted and modified by the State of Oklahoma through the OUBCC.

**SUBCHAPTER 16. IPC® 2018**

**748:20-16-1. Adoption of the International Plumbing Code®, 2018 Edition (IPC® 2018)**

(a) The Oklahoma Uniform Building Code Commission (the "OUBCC") hereby adopts the International Plumbing Code®, 2018 Edition (IPC® 2018), second printing (February, 2018), as amended and modified in this subchapter as the statewide minimum code for commercial plumbing construction in the State of Oklahoma pursuant to 59 O.S. 1000.23.

(b) The OUBCC through formal action expressly chose to adopt the IPC® 2018 as amended and modified in this subchapter, as the statewide minimum code for commercial plumbing construction in the State of Oklahoma.



(c) The OUBCC has pulled from the ICC website, published errata to the second printing of the IPC® through July 31, 2019. Any errata published after that date has not been reviewed or incorporated into these rules.

(d) This material contains information which is proprietary to and copyrighted by the International Code Council, Inc. The acronym "ICC" and the ICC logo are trademarks and service marks of ICC. ALL RIGHTS RESERVED.

#### **748:20-16-2. Effect of Adoption**

The International Plumbing Code®, 2018 Edition (IPC® 2018), as amended and revised by these rules, is hereby established and adopted as the statewide minimum code for commercial plumbing construction in Oklahoma pursuant to 59 O.S. § 1000.23, and may only be amended or altered by other jurisdictions pursuant to Oklahoma law and the administrative rules of the OUBCC as set forth in Title 748, Chapter 15 of the Oklahoma Administrative Code.

#### **748:20-16-3. IPC® 2018 Appendices**

(a) None of the appendices of the IPC® 2018 have been adopted by the OUBCC for inclusion in the statewide minimum code for commercial plumbing construction in the State of Oklahoma.

(b) Appendices A through E are not adopted as the statewide minimum code for commercial plumbing construction within the State of Oklahoma. However, other jurisdictions within the State of Oklahoma may adopt any or all of said appendices in accordance with 59 O.S. § 1000.29.

#### **748:20-16-4. IPC® 2018 Provisions Adopted and Modified**

(a) All chapters and provisions within chapters, including exceptions, of the IPC® 2018 not specifically addressed within these rules as being modified, deleted, moved or removed are hereby adopted without modification as the statewide minimum code for commercial plumbing construction within the State of Oklahoma pursuant to 59 O.S. § 1000.23. Chapters and provisions within chapters, including exceptions adopted with modifications are specifically addressed in these rules.

(b) To the extent any references in the IPC® 2018 as amended and modified in this subchapter are made to any other code or standard, the particular edition for that reference is defined in the referenced standards found in the IPC® 2018 as amended and modified in this subchapter and in Chapter 15 entitled "Referenced Standards."

#### **748:20-16-5. Participation in Federal Programs and/or Federally Funded or Financed Projects**

In order to maximize federal financial aid, assistance, participation, financing and/or funding in any public project(s) and/or federal financial aid, participation, funding for and participation in any federal program(s) by the State of Oklahoma, its agencies, public trusts and instrumentalities, or by any Oklahoma municipalities and other political subdivisions, that receive financial aid, assistance, participation, financing and/or funding for and participate in any federal program(s), the State of Oklahoma, its agencies and instrumentalities, and any Oklahoma municipalities and other political subdivisions, may cooperate with the United States Government and any agency or instrumentality thereof, in the manner authorized and provided by federal law and regulation and in doing so may perform all necessary functions and take all necessary actions for accomplishing such federal purposes and programs, including but not limited to, following and/or complying with federal laws, regulations and/or requirements arising

from or related to federal financial aid, assistance, participation, financing and/or funding, in the construction, alteration, movement, enlargement, replacement, repair, equipment, use and occupancy, location, improvement, expansion, operation, maintenance, removal, and demolition of buildings and structures or any appurtenances attached to such buildings or structures, notwithstanding any provisions of any and all uniform building codes and standards adopted by the OUBCC to the contrary.

#### **748:20-16-6. IPC® 2018 Chapter 1 Scope and Administration**

Chapter 1 of the Oklahoma adopted IPC® 2018, includes the following Preamble at the very beginning of the chapter:

(1) Pursuant to 59 O.S. § 1000.23, the OUBCC has adopted the IPC® 2018 as amended and revised by the OUBCC, as the statewide minimum code to be used by all entities for commercial plumbing construction in jurisdictions throughout the State of Oklahoma. However, the OUBCC's adoption of Chapter 1 "Scope and Administration" of the IPC® 2018 is for continuity purposes and the OUBCC's adoption of Chapter 1 recognizes the methods of best practice in fully implementing the statewide minimum code for commercial plumbing construction.

(2) All provisions of the adopted IPC® 2018, including Chapter 1, as amended and revised by the OUBCC, are hereby established and adopted as the statewide minimum code for commercial plumbing construction in Oklahoma pursuant to 59 O.S. § 1000.23, which may only be amended or altered pursuant to Oklahoma law and the administrative rules of the OUBCC as set forth in Title 748, Chapter 15 of the Oklahoma Administrative Code. However, the provisions of Chapter 1 adopted herein are only intended to be in force and effect to the extent that the respective provisions do not conflict with State law or the lawful exercise of code administration and enforcement jurisdiction by entities empowered to do so pursuant to applicable law.

(3) Section 106.1.1 Annual permit. This section has been modified to clarify an annual permit is a yearly permit which represents a group of individual permits for each alteration to an already approved electrical, gas, mechanical or plumbing installation. This section shall read: 106.1.1. Annual permit. An annual permit is a yearly permit which represents a group of individual permits for each alteration to an already approved electrical, gas, mechanical or plumbing installation. The building official is authorized to issue an annual permit upon application therefor to any person, firm or corporation regularly employing one or more qualified tradespersons in the building, structure or on the premises owned or operated by the applicant for the permit.

(4) Section 106.1.2 Annual permit records. This section has been modified to require the building official to collect the OUBCC permit fee for each individual permit that is part of the annual permit at the completion of the annual permit term. This section has been modified to read: 106.1.2 Annual permit records. The person to whom an annual permit is issued shall keep a detailed record of alterations made under such annual permit. The building official shall have access to such detailed records of alterations at all times. At the completion of the entity's annual permit term, the applicant shall file such detailed records of alterations with the building official. Pursuant to the authority of 59 O.S. § 1000.25, the building official shall collect fees for each individual permit which is part of the annual permit once the detailed records are submitted and remit such fees to the OUBCC.

(5) The OUBCC adoption of Chapter 1 in this manner is made with the recognition that the legal authority granting state and local code administration and enforcement jurisdictions the

power and discretion to administer and enforce codes arises from Oklahoma laws governing those jurisdictions. Furthermore, the OUBCC also recognizes that many state and local code administration and enforcement jurisdictions have already created, or have the lawful authority to create, departments, offices and administrative policies pursuant to various applicable laws and other adopted model codes with "Scope and Administration" provisions similar to Chapter 1 of the adopted IPC® 2018.

(6) This limited adoption of Chapter 1 is made in recognition of the authority and discretion possessed by jurisdictions to administer and enforce building codes. Exercising such authority and jurisdiction in a manner inconsistent with Chapter 1 must be supported by Oklahoma law. Code administration and enforcement jurisdictions shall not use the OUBCC'S limited adoption of Chapter 1 to circumvent the remainder of the requirements established by the Oklahoma adopted IPC® 2018 and the OUBCC will strongly oppose any such practice.

#### **748:20-16-7. IPC® 2018 Chapter 2 Definitions**

Chapter 2 of the Oklahoma adopted IPC® 2018 is adopted with the following modification: The definition of a BUILDING DRAIN has been modified to align with the industry standard where the site sewer (civil) picks up 5 feet outside of the building. This definition has been modified to read: 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.

#### **748:20-16-8. IPC® 2018 Chapter 3 General Regulations**

Chapter 3 of the Oklahoma adopted IPC® 2018 is adopted with the following modifications:

(1) Section 305.3 Pipes through foundations walls. This section has been modified to require the relieving arch or pipe sleeve pipe to conform with the materials and standards listed in Table 702.2 or as approved by the authority having jurisdiction. This section has been modified to read: 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.

(2) Section 305.4.1 Sewer depth. This section has been modified to include a depth for the septic tank connection unless otherwise approved by the authority having jurisdiction. This section has been modified to read: 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.

(3) Section 305.6 Protection against physical damage. This section has been modified to change distance 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 from less than 1 and a quarter inches to less than 1 and one half inches from the nearest edge of the member or the pipe will be protected by steel shield plates. This section has been modified to read:

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.

(4) Section 312.2 Drainage and vent water test. This section has been modified to change the test from a requirement of a 10 foot (3048 mm) head of water to a requirement of a 5 foot (1524 mm) head of water. This section has been modified to read: 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.

(5) Section 312.3 Drainage and vent air test. This section has been modified to change the equivalent pressure for the inches of mercury to match the feet of water change made for the drainage and vent test. This section has been modified to read: 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.

(6) 312.6 Gravity sewer test. This section has been modified to allow the authority having jurisdiction to determine if this test is required and change the test from a 10 foot (3048 mm) head of water test to a 5 foot (1024 mm) head of water test. This section has been modified to read: 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.

(7) Section 312.10.1 Inspections. This section has been modified to allow for third-party inspections to be accepted by the code official. This section has been modified to read: 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.

(8) Section 314.2.1 Condensate disposal. This section has been modified to allow condensate drains to terminate to an approved pit or French drain. This section has been modified to read: 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 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.

(9) Section 314.2.3.1 Water-level monitoring devices. This section has been modified to add an exception for when the section shall not apply. This section has been modified to read: 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.

#### **748:20-16-9. IPC® 2018 Chapter 4 Fixtures, Faucets and Fixture Fittings**

Chapter 4 of the Oklahoma adopted IPC® 2018 is adopted with the following modifications:

(1) 403.4.1 Directional signage. This section has been modified to specify directional signage indicating the route to 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. The change requires only one sign at each main entrance that is intended for public use and adds two exceptions, one for Group A occupancies that are part of an overall Group E occupancy and one for private-use Group B occupancies. This section has been modified to read: 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:

(A) Group A occupancies that are part of an overall Group E occupancy need not have directional signage.

(B) Private-use Group B occupancies need not have directional signage.

(2) Section 405.9 Slip joint connections. This section has been modified to allow the gasket to be installed from the fixture outlet to within 18 inches (457 mm) downstream of the trap outlet seal. It has been modified to read: 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.

(3) Section 408.2 Water connection. This section has been modified to address errata published by the ICC® to correct section references for when the water supply to a bidet is required to be protected against backflow by an air gap or backflow preventer. This section has been modified to read: 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.

(4) Section 410.4 Substitution. This section has been modified to allow a water dispenser connected to the potable water distribution system to be permitted to be substituted for the required drinking fountain in occupancy Group B, F, M, I-4, and S with an occupant load of

less than 50. This section has been modified to read: 410.4 Substitution. Where restaurants provide drinking water in a container free of charge, drinking fountains shall not be required in those restaurants. In occupancy Group B, F, M, I-4 and S, with an occupant load less than 50, where drinking fountains are required, a water dispenser connected to the potable water distribution system shall be permitted to be substituted for the required drinking fountain. In occupancies other than restaurants where drinking fountains are required, water dispensers shall be permitted to be substituted for not more than 50 percent of the required number of drinking fountains.

#### **748:20-16-10. IPC® Chapter 5 [RESERVED]**

#### **748:20-16-11. IPC® 2018 Chapter 6 Water Supply and Distribution**

Chapter 6 of the Oklahoma adopted IPC® 2018 is adopted with the following modifications:

(1) Section 604.5 Size of fixture supply. This section has been modified to add an exception to allow domestic dishwashers and drinking fountains to terminate more than 30 inches (762 mm) from the point of connection to the fixture. This section has been modified to read:

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.

(2) Table 605.3 Water Service Pipe. This table has been modified to address errata published by the ICC® to correct a standard listing from "CSA B137.11" to "CSA B137.1" in the 16th line of the table. The table has been modified to read: Table 605.3 Water Service Pipe. The table contains 19 rows and 2 columns, and is described below:

(A) Row 1 contains the header row. Each column heading is listed below:

(i) Row 1, column 1, is entitled "Material."

(ii) Row 1, column 2, is entitled "Standard."

(B) Row 2 containing the material type entitled "Acrylonitrile butadiene styrene (ABS) plastic pipe" in column 1, was not modified.

(C) Row 3 containing the material type entitled "Chlorinated polyvinyl chloride (CPVC) plastic pipe" in column 1, was not modified.

(D) Row 4 containing the material type entitled "Chlorinated polyvinyl chloride/aluminum/chlorinated polyvinyl chloride (CPVC/AL/CPVC)" in column 1, was not modified.

(E) Row 5 containing the material type entitled "Copper or copper-alloy pipe" in column 1, was not modified.

(F) Row 6 containing the material type entitled "Copper or copper-alloy pipe (Type K, WK, L, WL, M or WM)" in column 1, was not modified.

(G) Row 7 containing the material type entitled "cross-linked polyethylene (PEX) plastic pipe and tubing" in column 1, was not modified.

(H) Row 8 containing the material type entitled "Cross-linked polyethylene/aluminum/cross linked polyethylene (PEX-AL-PEX) pipe" in column 1, was not modified.

(I) Row 9 containing the material type entitled "Cross-linked polyethylene/aluminum/high-density polyethylene (PEX-AL-HDPE)" in column 1, was not modified.

(J) Row 10 containing the material type entitled "Ductile iron water pipe" in column 1, was not modified.

(K) Row 11 containing the material type entitled "Galvanized steel pipe" in column 1, was not modified.

(L) Row 12 containing the material type entitled "Polyethylene (PE) plastic pipe" in column 1, was not modified.

(M) Row 13 containing the material type entitled "Polyethylene (PE) plastic tubing" in column 1, was not modified.

(N) Row 14 containing the material type entitled "Polyethylene/aluminum/polyethylene (PE-AL-PE) pipe" in column 1, was not modified.

(O) Row 15 containing the material type entitled "Polyethylene of raised temperature (PE-RT) plastic tubing" in column 1 was not modified.

(P) Row 16 has been modified to read as described below:

(i) Row 16, column 1 lists the material type: "Polypropylene (PP) plastic pipe or tubing."

(ii) Row 16, column 2 lists the standards: "ASTM F2389; CSA B137.1."

(Q) Row 17 containing the material type entitled "Polyvinyl chloride (PVC) plastic pipe in column 1 was not modified.

(R) Row 18 containing the material type entitled "Stainless steel pipe (Type 304/304L)" in column 1, was not modified.

(S) Row 19 containing the material type entitled "Stainless steel pipe (Type 316/316L)" in column 1, was not modified.

(2) Section 608.16.4 Protection by a vacuum breaker. This section has been modified to address errata published by the ICC to specify the critical level of installation height of the vacuum breaker shall be not less than 12 inches (305 mm) above the highest elevation of downstream piping and flood level rim of the fixture or device. This section has been modified to read: 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.

(3) Section 608.17.5 Connections to lawn irrigation systems. This section has been modified to add a spill resistant backflow preventer as an option for protection. This section has been modified to read: 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.

(4) Section 608.17.7 Chemical dispenser. This section has been modified to address errata published by the ICC®. The modification deletes a reference to a section that is not applicable to this section of code. This section has been modified to read: 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.

#### **748:20-16-12. IPC® 2018 Chapter 7 Sanitary Drainage**

Chapter 7 of the Oklahoma adopted IPC® 2018 is adopted with the following modifications:

(1) Section 705.10.2 Solvent cementing. This section has been modified to delete the exceptions for not using primer under certain conditions. This section has been modified to read: 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.

(2) Section 708.1.3 Building drain and building sewer junction. This section has been modified to change the requirement for the cleanout to be located at the junction or from within 10 feet to within 12 feet of the developed length of piping upstream of the junction. This section has been modified to read: 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.

#### **748:20-16-13. IPC 2018 Chapter 8 Indirect/Special Waste [NEW]**

Chapter 8 of the Oklahoma adopted IPC® 2018 is adopted with the following modification: Section 802.1 Where required. This section has been modified to address errata published by the ICC® to correct a section reference specified in the section from "802.1.1 through 802.1.8" to "802.1.1 through 802.1.7." This section has been modified to read: 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.

#### **748:20-16-14. IPC® 2018 Chapter 9 Vents**

Chapter 9 of the Oklahoma adopted IPC® 2018 is adopted with the following modifications:

(1) Section 903.1 Roof extension. This section has been modified to specify the number of inches where the open vent pipes that extend through the roof shall be terminated. This section has been modified to read: 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.

(2) Section 919.1 General. This section has been modified to address errata published by the ICC® to correct a specified section reference from "Section 105.3" to "Section 316." This section has been modified to read: 919.1 General. Engineered vent systems shall comply with this section and the design, submittal, approval, inspection and testing requirements of Section 316.

#### **748:20-16-15. IPC® Chapter 10 Traps, Interceptors, and Separators**

Chapter 10 of the Oklahoma adopted IPC ® 2018 is adopted with the following modification: Section 1003.4 Oil separators required. This section has been modified to add a second exception to the requirement for installing an oil separator. This section has been modified to read: 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.

#### **748:20-16-16. IPC® 2018 Chapter 11 Storm Drainage**

Chapter 11 of the Oklahoma adopted IPC® 2018 is adopted with the following modifications:

(1) Section 1101.7 Roof design. This section has been modified to change the section number for the requirement to accommodate the design rate for secondary roof drainage from Section 1106 to Section 1108. This section has been modified to read: 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.

(2) Section 1101.9 Backwater valves. This section has been modified to address errata published by the ICC® to correct a specified section reference from "715" to "714". This section has been modified to read: 1101.9 Backwater valves. Storm drainage systems shall be provided with backwater valves as required for sanitary drainage systems in accordance with Section 714.

(3) Table 1108.1 Size of Secondary Scuppers for a 10.2-inch Per Hour Rate of Rainfall. This table has been added to provide sizing guidance for secondary scuppers for a 10.2-inch per hour rate of rainfall. The table has been added to read: Table 1108.1 Size of Secondary Scuppers for a 10.2-inch Per Hour Rate of Rainfall. The table contains 5 rows and 2 columns. The second column contains seven sub-columns. The table is described

(A) Row 1 is the header row and contains the following headings:

- (i) Row 1, column 1, is entitled "Head in inches."
  - (ii) Row 1, column 2 is entitled "Horizontally Projected Roof areas (Square Feet) Length of Weir in inches."
    - (I) Row 1, column 2, subcolumn 1 is entitled "4."
    - (II) Row 1, column 2, subcolumn 2 is entitled "6."
    - (III) Row 1, column 2, subcolumn 3 is entitled "8."
    - (IV) Row 1, column 2, subcolumn 4 is entitled "12."
    - (V) Row 1, column 2, subcolumn 5 is entitled "16."
    - (VI) Row 1, column 2, subcolumn 6 is entitled "20."
    - (VII) Row 1, column 2 subcolumn 7 is entitled "24."
- (B) Row 2 contains the following information in both of the columns listed in header row 1:
- (i) Row 2, column 1 lists the Head in inches number "1."
  - (ii) Row 2, column 2 lists the following in each of the seven subcolumns:
    - (I) Row 2, column 2, subcolumn 1 entitled "4" lists "112."
    - (II) Row 2, column 2, subcolumn 2 entitled "6" lists "169."
    - (III) Row 2, column 2, subcolumn 3 entitled "8" lists "226."
    - (IV) Row 2, column 2, subcolumn 4 entitled "12" lists "339."
    - (V) Row 2, column 2, subcolumn 5 entitled "16" lists "452."
    - (VI) Row 2, column 2 subcolumn 6 entitled "20" lists "565."
    - (VII) Row 2, column 2, subcolumn 7 entitled "24" lists "678."
- (C) Row 3 contains the following information in both of the columns listed in header row 1:
- (i) Row 3, column 1 lists the Head in inches number "2."
  - (ii) Row 3, column 2 lists the following in each of the seven subcolumns:
    - (I) Row 3, column 2, subcolumn 1 entitled "4" lists "314."
    - (II) Row 3, column 2, subcolumn 2 entitled "6" lists "471."
    - (III) Row 3, column 2, subcolumn 3 entitled "8" lists "628."
    - (IV) Row 3, column 2, subcolumn 4 entitled "12" lists "942."
    - (V) Row 3, column 2, subcolumn 5 entitled "16" lists "1256."
    - (VI) Row 3, column 2 subcolumn 6 entitled "20" lists "1571."
    - (VII) Row 3, column 2, subcolumn 7 entitled "24" lists "1885."
- (D) Row 4 contains the following information in both of the columns listed in header row 1:
- (i) Row 4, column 1 lists the Head in inches number "3."
  - (ii) Row 4, column 2 lists the following in each of the seven subcolumns:
    - (I) Row 4, column 2, subcolumn 1 entitled "4" lists "565."
    - (II) Row 4, column 2, subcolumn 2 entitled "6" lists "848."
    - (III) Row 4, column 2, subcolumn 3 entitled "8" lists "1130."
    - (IV) Row 4, column 2, subcolumn 4 entitled "12" lists "1696."
    - (V) Row 4, column 2, subcolumn 5 entitled "16" lists "2262."
    - (VI) Row 4, column 2 subcolumn 6 entitled "20" lists "2828."
    - (VII) Row 4, column 2, subcolumn 7 entitled "24" lists "3393."
- (E) Row 5 contains the following information in both of the columns listed in header row 1:
- (i) Row 5, column 1 lists the Head in inches number "4."

(ii) Row 5, column 2 lists the following in each of the seven subcolumns:

(I) Row 5, column 2, subcolumn 1 entitled "4" lists "879."

(II) Row 5, column 2, subcolumn 2 entitled "6" lists "1319."

(III) Row 5, column 2, subcolumn 3 entitled "8" lists "1759."

(VI) Row 5, column 2, subcolumn 4 entitled "12" lists "2637."

(V) Row 5, column 2, subcolumn 5 entitled "16" lists "3519."

(VI) Row 5, column 2 subcolumn 6 entitled "20" lists "4399."

(VII) Row 2, column 2, subcolumn 7 entitled "24" lists "5279."

(F) Beneath the table the following should be added: 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.

(4) Section 1108.3 Sizing of secondary drains. This section has been modified to include the use of scuppers or increase the sizing of secondary drains to accommodate rainfalls of 10.2 inches per hour and includes minimum design loads. This section has been modified to read: 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.

## **748:20-16-17. IPC® Chapter 12 [RESERVED]**

## **748:20-16-18. IPC® 2018 Chapter 13 Nonpotable Water Systems**

Chapter 13 of the Oklahoma adopted IPC® 2018 is adopted with the following modification: Section 1301.9.5 Overflow. This section has been modified to require the section to apply to any walkway not just those on roofs. This section has been modified to read: 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.

## **748:20-16-19. IPC® Chapter 14 [RESERVED]**

### **748:20-16-20. IPC® 2018 Chapter 15 Referenced Standards**

Chapter 15 of the Oklahoma adopted IPC® 2018 is adopted with the following modifications:

- (1) A reference to ANSI A118.10-99 Specifications for Load Bearing, Bonded, Waterproofed Membranes for Thin Set Ceramic Tile and Dimension Stone Installation referenced in Sections 421.5.2.5 and 421.5.2.6 has been added to the code. This reference has been added to read: ANSI A118.10-99 Specifications for Load Bearing, Bonded, Waterproof Membranes for Thin Set Ceramic Tile and Dimension Stone Installation. 421.5.2.5, 421.5.2.6.
- (2) The reference to the International Building Code® has been modified to include after the title the words "as adopted and modified by the State of Oklahoma through the OUBCC. This section has been modified to read: IBC®-18 International Building Code® as adopted and modified by the State of Oklahoma through the OUBCC.
- (3) The reference to the International Energy Conservation Code® has been modified to change the edition year to 2006. This section has been modified to read: IECC-06 International Energy Conservation Code®.
- (4) The reference to the International Fire Code® has been modified to include after the title the words "as adopted and modified by the State of Oklahoma through the OUBCC." This section has been modified to read: IFC®-18 International Fire Code® as adopted and modified by the State of Oklahoma through the OUBCC.
- (5) The reference to the International Fuel Gas Code® has been modified to include after the title the words "as adopted and modified by the State of Oklahoma through the OUBCC." This section has been modified to read: IFGC®-18 International Fuel Gas Code® as adopted and modified by the State of Oklahoma through the OUBCC.
- (6) The reference to the International Mechanical Code® has been modified to include after the title the words "as adopted and modified by the State of Oklahoma through the OUBCC." This section has been modified to read: IMC®-18 International Mechanical Code® as adopted and modified by the State of Oklahoma through the OUBCC.
- (7) The reference to the International Residential Code® has been modified to change the edition year to 2015 and include after the title the words "as adopted and modified by the State of Oklahoma through the OUBCC." This section has been modified to read: IRC®-15 International Residential Code® as adopted and modified by the State of Oklahoma through the OUBCC.
- (8) The referenced standard for NFPA® 70 National Electrical Code® has been modified to include the words after the title "as adopted and modified by the State of Oklahoma through the OUBCC." This section has been modified to read: 70-17 National Electrical Code® as adopted and modified by the State of Oklahoma through the OUBCC.
- (9) The reference standard for TCNA/ANSI A118.10-99: Specifications for Load Bearing, Bonded, Waterproof Membranes for Thin Set Ceramic Tile and Dimension Stone Installation referenced in Sections 421.5.2.5 and 421.5.2.6 has been stricken from the code.