

**City of Bryan**  
**Building Services Staff Code Review for 2015 IPC**  
**Significant Changes since 2012 IPC**

**2015 International Plumbing Code (IPC)**

202            Alternate Onsite Non-potable Water Definition

This term has been added to support a revised Chapter 13 that covers how various non-potable waters are to be collected, stored and distributed.

403.1        Determining Minimum Number of Plumbing Fixtures

The IBC occupancy classifications are no longer used to determine which row in Table 403.1, Minimum Number of Required Plumbing Fixtures, to use for fixture quantities. The actual use of the building or space determines which row in the table is used.

403.3        Required Public Toilet Facilities Exception

Occupancies that have limited areas for public access, such as dry cleaners, take out only restaurants and automated teller machine lobbies, 300 square feet or less do not required public facilities for this limited areas.

403.4.1     Directional Signage for Location of Public Toilet Facilities

Directional signs to public toilet facilities now requires that signage be located at the main entrance to the building or tenant space.

423.3        Footbaths, Pedicure Baths and Shampoo Sinks

Water-temperature-limiting devices are required for footbaths, and head shampoo sinks.

501.3        Water Heater Drain Valves

The standard covering water heater drain valves has been discontinued by the standard promulgator. Minimum criteria for drain size and the hose connection have been added to code. (drain valve inlet not less than ¾ inch nominal iron pipe size and the outlet shall be provided with male garden hose threads)

504.6        Temperature and Pressure Relief Discharge Piping

The T&P relief valve discharge pipe termination must have an air gap suitable to protect against backflow conditions.

504.7.2     Water Heater Pan Drain Line

**City of Bryan**  
**Building Services Staff Code Review for 2015 IPC**  
**Significant Changes since 2012 IPC**

**2015 International Plumbing Code (IPC)**

In a replacement water heater installation, the code allows a pan to not have a drain line if one is not present.

601.5            Rehabilitation of Piping Systems by Internal Lining

An epoxy lining system standard has been added to code.

605.2.1        Lead Content of Components Conveying Drinking Water

The code now requires that pipe, pipe fittings, joints, valves, faucets and fixture fittings that are used to supply water for drinking or cooking purposes have not more than 0.25 percent of lead content.

Tables 605.3, 605.4    CPVC/AL/CPVC Water Service and Water Distribution Piping

Sect. 605.16

A new type of CPVC pipe (CPVC/AL/CPV) has been added Chapter 6. The tubing has a composite wall made up of an inner and outer CPVC layer with an aluminum core.

Table 605.5, Sections 605.14.3, 605.14.5, 605.18.3, 605.22.2, 605.23.3

Groove and Shouldered Mechanical Joints and Press Connect Fittings

Standard ASME B16.51 for press-connect fittings for copper tubing and copper pipe has been added to the code to provide an additional option for jointing and connecting.

605.7, Table 605.7    Valve Compliance to Standards

All types of valves that supply drinking water must now comply with NSF 61. Standards for numerous types of valves.

607.2.1        Hot Water Temperature Maintenance System Controls

Code now requires temperature maintenance systems (for maintaining hot water temperature near plumbing fixtures) to be automatically turned off when there is not a demand for hot water. Section 607.2.1 and its subsection 607.2.1.1 do not apply to Group R2, R3 and R4 occupancies that are 3 stories or less in height.

**City of Bryan**  
**Building Services Staff Code Review for 2015 IPC**  
**Significant Changes since 2012 IPC**

**2015 International Plumbing Code (IPC)**

- 607.3 Hot Water Thermal Expansion Pressure Control
- A thermal expansion tank is now the only code approved method for controlling thermal-expansion-caused pressure increase created by water being heated in a closed system.
- 608.8, 608.8.1, 608.2 Identification of Nonpotable Water
- Fixtures that utilize nonpotable water must be identified with words and a symbol indicating that Nonpotable water is being used. The color purple is established for identifying distribution piping for nonpotable water.
- 702.5 Temperature Rating of Drainage Piping
- Wastewater having a temperature greater than 140° F does not need to be cooled before it enters the drainage system if the drainage pipe is rated for the higher temperature.
- 705.11.2 Exception for Solvent Cementing PVC Piping 4 Inches and Smaller
- The application of a primer to drain, waste and vent PVC pipe and fittings prior to solvent cementing is not required for 4 inch pipe size and smaller.
- 708 Cleanouts for Drainage and Waste Systems
- Brass cleanout plugs are permitted for metallic piping only. Where located at a finish wall, the cleanout must be within 1½ inches of the finished surface. A cleanout is no longer required at the base of each waste or soil stack.
- 716 Vacuum Drainage Systems
- Vacuum drainage system provisions have been moved from the appendix to code.
- 717 Replacement of Sewers by Pipe-Bursting Method
- The code limits the pipe-bursting method for underground to pipes that are 6 inches and smaller. The only material that the code allows for the replacement is polyethylene plastic pipe having an SDR 17 wall thickness.
- 802.3 Waste Receptors, Hub Drains and Sand Pipes

**City of Bryan**  
**Building Services Staff Code Review for 2015 IPC**  
**Significant Changes since 2012 IPC**

**2015 International Plumbing Code (IPC)**

Hub drains now require a strainer.

1002.1            Exception for Traps for Parking Garage Floor Drains

Traps are not required for parking garage floor drains where the drains are connected to a storm sewer system.

1002.4, 1002.4.1      Trap Seal Protection against Evaporation

Section 1002.4 has been expanded to cover two additional types of trap seal protection devices and to distinguish between the different types of water trap seal protection devices.

1003.3.6            Gravity Grease Interceptors

A section and standard covering gravity grease interceptors have been added to code.

1003.3.7            Direct Connecting of Grease Interceptor Discharge

Grease Interceptor discharge piping must connect directly to the sanitary drainage system.

1003.4            Oil Separator Required

Section 1003.4 has been clarified to indicate where oil separators are required. An addition to the exception concerning alarms has been made.

1003.6            Clothes Washer Discharge Interceptor

The main section now requires interceptors for all applications. The new exceptions provide relief from this requirement for clothes washers in individual dwelling units and for single individual unit type washers installed anywhere else. (example: car wash, small restaurants)

1003.9            Venting of Interceptors and Separators

Interceptors and separators must be vented.

1105.2, 1106.2      Sizing of Roof Drains Vertical and Horizontal Storm Drain Piping

Storm drainage piping must now be sized based on the published roof drain flow rate and anticipated ponding at the roof drain.

**City of Bryan**  
**Building Services Staff Code Review for 2015 IPC**  
**Significant Changes since 2012 IPC**

**2015 International Plumbing Code (IPC)**

**1106.3, 1106.6 Sizing of Gutters and Leaders**

The 2012 Table 1106.2(2), which covered the vertical leader sizing requirements, has been replaced by the simplified Table 1106.3. The 2012 Table 1106.6, which covered horizontal gutter sizing requirements, has been replaced by the simplified Table 1106.6.

**Chapter 13 Nonpotable Water Systems**

Chapter 13 is a new chapter covering requirements for Nonpotable water systems.

**Chapter 14 Subsurface Landscape Irrigation Systems**

New Chapter 14 covers provisions for subsurface landscape irrigation systems connected to Nonpotable water from onsite water reuse systems.

**City of Bryan**  
**Building Services Staff Code Review for 2012 IPC**  
**Significant Changes since 2009 IPC**

**2012 International Plumbing Code (IPC)**

303.4                      Material Identification and Third-Party Certification

The modification made by Section 303.4 requires all plumbing products and materials be listed by a third-party certification agency. Table 303.4 was deleted.

308.9                      Parallel Water Distribution Systems

Hot water piping is now permitted to be bundled together with cold or hot water piping. However, this installation method is only permitted where each hot water pipe is insulated.

Table 403.1                Minimum Number of Required Plumbing Fixtures

Service sinks are no longer required in Group B and M occupancies where the occupant load does not exceed 15.

403.2                      Separate Toilet Facilities in Group M Occupancies

The exemption from separate plumbing facilities for each sex in Group M Mercantile Occupancies now applies where the occupant load of the occupancy does not exceed 100.

403.2.1                    Family or Assisted Use Toilet Facilities Serving as Separate Facilities

Where separate toilet facilities for each sex are required and only one water closet is mandated in each facility, two family or assisted-use toilet facilities are now permitted to substitute for the separate facilities for each sex.

403.3.2                    Relationship of Toilet Rooms and Food Preparation Areas

The IPC has added the IBC requirement prohibiting the opening of toilet rooms directly into the food preparation areas.

403.3.6                    Locking of Toilet Room Doors

Locking devices are now prohibited on egress doors of toilet rooms designed for multiple occupants.

403.5                      Drinking Fountain Location

Where drinking fountains are required, the location of the fountain has been specified regarding their placement in multi-tenant facilities, similar to the locations for public

**City of Bryan**  
**Building Services Staff Code Review for 2012 IPC**  
**Significant Changes since 2009 IPC**

**2012 International Plumbing Code (IPC)**

toilet facilities. Travel distance of 500 feet of the most remote location in the tenant space and 300 feet for covered or open malls.

405.3                    Minimum Water Closet Compartment Size

The minimum depth of a water closet compartment containing a wall hung water closet has been reduced from 60 inches to 56 inches.

405.4                    Floor and Wall Drainage Connections

The use of a waste connector and sealing gasket is now permitted for another acceptable type of water closet connection method.

407.2                    Bathtub Waste Outlets and Overflows

Bathtubs are now required to be equipped with an overflow and the required stoppers must be watertight.

504.7                    Water Heater Pans

It has been clarified that drain pans are only required for storage-tank-type water heaters or hot water storage tanks.

605                      Polyethylene of Raised-Temperature Plastic Tubing

PE-RT plastic hot and cold water tubing and distribution systems are now recognized by the IPC.

606.7                    Labeling of Water Distribution Pipes in Bundles

Water distribution piping that is installed in bundles must be labeled for content and direction of flow.

607.1.1                Water-Temperature-Limiting Means

A water heater thermostat is now prohibited from being used as the temperature-limiting device where the code requires a limit for hot or tempered water.

607.2                    Hot or Tempered Water Supply to Fixtures

The maximum distance between a hot water supply source and all fixtures served by the supply source has been reduced from 100 feet to 50 feet.

**City of Bryan**  
**Building Services Staff Code Review for 2012 IPC**  
**Significant Changes since 2009 IPC**

**2012 International Plumbing Code (IPC)**

- 607.5                      Hot Water Piping Insulation
- The IECC requirement for insulating hot water piping in automatic temperature maintenance systems is now required in the IPC.
- 712.3.5                    Sump Pump Connection to the Drainage System
- Where sump pumps connect to the drainage system are now permitted to connect to a building drain, building sewer, soil stack, waste stack or horizontal branch drain.
- 802.1.8                    Indirect Discharge of Food Preparation Sinks
- Sinks used for food preparation and consumption purposes are no longer permitted to connect directly to the drainage system.
- 802.2                      Installation of Indirect Waste Piping
- The horizontal developed length and total developed length without a trap has been increased. In a new exception a trap is not required for clear-water waste in an indirect piping system.
- 802.3                      Prohibited Locations for Waste Receptors
- An open unattended trap located in a plenum, crawl space, attic or interstitial space above a ceiling or a floor has been added to the list of locations where waste receptors cannot be located.
- 901.3                      Air Admittance Valves for Chemical Waste Vent Systems
- Air admittance valves complying with reference standard ASSE 1049 are now permitted to be used for venting chemical waste systems.
- 1002.1                     Floor Drains in Multi-Level Parking Structures
- Floor drains in multi-level parking garages are no longer required to have individual traps, provided the drains are connected to a main trap before discharging to a combined sewer.
- 1003.3.1                  Alternate Grease Interceptor Locations
- Grease interceptors are now permitted to be installed in series instead of requiring replacement of an existing grease interceptor that is too small.



**City of Bryan**  
**Building Services Staff Code Review for 2012 IPC**  
**Significant Changes since 2009 IPC**

**2012 International Plumbing Code (IPC)**

Chapter 13                      Gray-Water Recycling Systems

Provisions addressing gray-water recycling systems have been relocated from Appendix C to a new Chapter 13 in the body of the code.