

**THE CITY OF NORTH KANSAS CITY BUILDING AND CONSTRUCTION CODE UPDATE
FROM THE 2012 TO THE 2018 INTERNATIONAL CODES, EFFECTIVE JULY 1, 2018**

**SIGNIFICANT CODE CHANGES
International Plumbing Code**

Chapter 3 General Regulations:

- 303.5 Third-party Certification for Cast-iron Pipe, this new section invokes additional inspection and certification requirements for third party certifications agencies that inspect the products at the manufacturing location.
- 305.1 This change clarifies where and what type of metallic piping is required to be protected from corrosion.
- 305.6 For concealed piping installed through holes or notches, the minimum distance to the face of the framing member without protection has been reduced.
- 308.6 Additional information clarifies where sway bracing is needed for drainage piping.
- 308.10 A thermal expansion tank cannot be supported by the piping connected to the tank.

Chapter 4 Fixtures, Faucets and Fixture Fittings:

- 403.1 Assembly areas used for gaming (gambling) now have specific ratios for plumbing fixture requirements.
- 403.1 The Occupancy (Group) column has been deleted from Table 403.1 for greater flexibility and accuracy.
- 403.1 Outdoor public swimming pools now have specific requirements for plumbing fixtures.
- 403.1.2 Single-user toilet facilities having required plumbing fixtures must be labeled for use by either sex.
- 403.1.3 Multiple toilet facilities in a building for the same sex must have the required lavatories distributed proportionally.
- 403.2 Business occupancies having 25 or fewer persons are allowed to have the required single-user toilet rooms not labeled for use by a specific sex.
- 403.3 The required toilet facilities for a building or tenant space do not need to be "in" the building that requires the toilet facilities.
- 405.3.1 The minimum distances from a fixture's center line to other fixtures or obstructions is clarified.

- 405.3.5 The minimum distance between urinal partitions is clarified. ☐ 405.5 Plumbing fixtures having a pumped waste arrangement must comply with a standard that covers the integral waste pumping system.
- 409.1 Residential dishwashers must now comply with Standard NSF 184.
- 409.4 The requirement for residential dishwasher waste connections was moved from section 802.1.6 to new Section 409.4. The language was modified for clarity.
- 411.3 Emergency shower or eye wash station water requires temperature control by an ASSE 1071 mixing valve.
- 412.7 Where other requirements outside of the code require limiting the discharge water temperature at a faucet or fixture fitting, installation of an ASSE 1062 device is an approved method of control.
- 422 Section 422 concerning Health Care Fixtures and Equipment is deleted.

Chapter 5 Water Heaters:

- 502.1 Solar thermal water heating systems must conform to the International Mechanical Code and ICC 90/SRCC 300.
- 504.6 Where insert fittings are used in T&P valve discharge piping, the piping must be of larger size.
- 504.7 Aluminum and plastic are approved drain pan materials. Plastic drain pans must not be used under gas-fired water heaters.
- 602.3.1 Where local regulations for the construction of water wells do not exist or are lacking details, the code requires well construction to comply with Standard NGWA-01.
- 605.13.7, 605.14.4, 605.16.3 The push-fit method of joining was not explicitly described in the “types of joints” sections for various piping materials. This change makes the acceptability of this type of mechanical joint clearly.

Chapter 6 Water Supply and Distribution:

- 607.3 Thermal expansion control devices, other than thermal expansion tanks, can be used for control of hot water system pressures.
- 608.3, 608.4 Some of the requirements in Section 608.3 were extracted, reworded and put into a new section to provide clarity about backflow protection requirements.
- 608.12 Drinking water must be protected from contamination from contact with water tanks, coatings on the inside of water tanks and liners on the inside of water tanks. Standard NSF 61 is the testing protocol for determining nonacceptable levels of contamination by components in contact with drinking water.
- 608.17.1.1, 608.17.1.2 Only carbonated dispensers require a backflow preventer that is designed for exposure to carbon dioxide gas. Also, because of the potential for cross-contamination between noncarbonated drink dispensers and or coffee machines, each

dispenser or machine supplied with potable water must have a backflow preventer (or air gap) at the connection to the potable water supply.

- 608.17.10 The potable water connection to a humidifier that does not have internal backflow protection must have an ASSE 1012 backflow preventer or an air gap. ¶ 609.1 Outdated terminology for different types of medical facilities has been replaced with terminology that is aligned with industry standards and how the IBC refers to such facilities.
- 611.1 Point-of-use reverse osmosis drinking water treatment units must now comply entirely with NSF 58 or CSA B483.1.

Chapter Sanitary Drainage:

- 701.2 Gray water systems are not required to be connected to a public sewer or a private sewage disposal system provided that they discharge to systems in accordance with Chapters 13 or 14.
- 701.8 The installation of drainage piping above “food areas” is no longer prohibited.
- 702.3 Standards for polypropylene (PP) plastic pipe are added to Table 702.3 for code approved building sewer piping.
- 703.4 The use of existing building sewers and existing building drains for new building plumbing system is clarified.
- 704.1 Piping conveying grease-laden waste must have a slope of not less than ¼ inch per foot (2percent).
- 704.2 Allowable reductions of pipe size are clarified and expanded. ¶ 705.16.4 One joint between ABS plastic building drain piping and PVC plastic building sewer drain piping can be solvent cemented with special cement.
- 709.3 Conversion of gallon per minute drainage flows to dfu values has been clarified.
- 712.3.2 Gas-tight removable covers for sumps having ejectors and sewage pumps cannot be located more than 2 inches below grade or floor level.
- 712.4.2 The maximum solids diameter capacity for waste pumps and waste ejectors has been reduced from 1-inch diameter to ½ inch diameter.
- 713 Section 713 covering sanitary drainage systems in health care facilities has been deleted in its entirety.
- 716 The section on replacement of building sewers by pipe-bursting methods has been expanded to include replacement of underground building drains.

Chapter 8 Indirect/Special Waste:

- 801.2, 802.1 Air humidification equipment that has a waste discharge must have the discharge piping connect in an indirect method to the sanitary drainage system.
- 802.4.3.1 An alternative method for connecting a laundry tub drain, without a fixture trap, to a clothes washer standpipe is added to the code.

Chapter 9 Vents:

- 918.8 An air admittance valve cannot be used to resolve the problem of an open vent terminal that is too close to a building air intake.

Chapter 10 Traps Interceptors and Separators:

- 1003.3.2 Food waste disposer discharge to any type of grease interceptor is prohibited.
- 1003.3.3 Additives to grease interceptors are limited to microbes dispensed by systems that comply with ASME A112.14.6 and allowed by the interceptor manufacturer.

Chapter 11 Storm Drainage:

- 1102.4 Additional types of piping materials and standards were added to the table for approved building storm sewer pipe.
- 1106.5 Scuppers for primary and secondary roof drainage must be located and sized to prevent the water depth on the roof from exceeding the maximum allowable water depth for the structural capacity of the roof structure.

Chapter 13 Gray Water Recycling Systems:

- 1302.7.2 The consensus standards covering tanks for on-site non-potable water reuse systems including gray water are removed from the code.
- 1303.1.1 The IPC now references the International Fire Code (IFC) regulations covering the use of non-potable water in water based fire protection systems.
- 1303.15.8, 1303.15.9 Site conditions can affect the quality of collected untreated (raw) rainwater. Standard ASTM E2727 must be used to determine the impact of those site conditions.