


**PART**

# 1

## International Plumbing Code

### Chapters 1 through 15

- **Chapter 1** Scope and Administration  
**No changes addressed**
- **Chapter 2** Definitions
- **Chapter 3** General Regulations
- **Chapter 4** Fixtures, Faucets and Fixture Fittings
- **Chapter 5** Water Heaters
- **Chapter 6** Water Supply and Distribution
- **Chapter 7** Sanitary Drainage
- **Chapter 8** Indirect/Special Waste
- **Chapter 9** Vents
- **Chapter 10** Traps, Interceptors and Separators
- **Chapter 11** Storm Drainage
- **Chapter 12** Special Piping and Storage Systems **No changes addressed**
- **Chapter 13** Nonpotable Water Systems  
**No changes addressed**
- **Chapter 14** Subsurface Landscape Irrigation Systems **No changes addressed**
- **Chapter 15** Referenced Standards  
**No changes addressed**



**C**hapter 1 of the *International Plumbing Code*® (IPC) clarifies how the code will be enforced by code officials. Definitions of plumbing code terminology are found in Chapter 2. General regulations in Chapter 3 identify requirements not listed in other code chapters, such as testing and inspections. Fixtures and water heaters are addressed in Chapters 4 and 5, respectively. Chapters 6 and 7 regulate water and drainage piping systems. Indirect and special waste is covered in Chapter 8. Chapter 9 details acceptable venting methodologies with in-depth provisions for piping arrangements. The provisions for traps and various receptors are found in Chapter 10. Storm drainage, with its collection system piping provisions, is covered in Chapter 11. Installation, design, storage, handling and use of non-flammable medical gas systems are addressed in Chapter 12. Nonpotable water systems such as those for the storage, treatment, and use of gray water, rainwater, reclaimed water and alternate onsite nonpotable water are addressed in Chapter 13. Methods for the use of nonpotable water for subsurface irrigation are addressed in Chapter 14. Standards referenced by the code sections are indicated in Chapter 15 along with specific details about the applicable edition year and title. Appendices A through E cover non-mandatory provisions for permit fees, rainfall rates, degree design temperature, water (piping) sizing methods, and structural integrity protection rules for notching of and boring of holes in wood and steel members. ■

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Alternate Onsite Nonpotable Water Definition

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Backflow Preventer Definition

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Mechanical Joint Definition

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Toilet Facility Definition

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Waste Receptor Definition

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Drinking Fountain, Water Cooler and Water Dispenser Definitions; Substitution for Drinking Fountains

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**403.3**

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**421.1**

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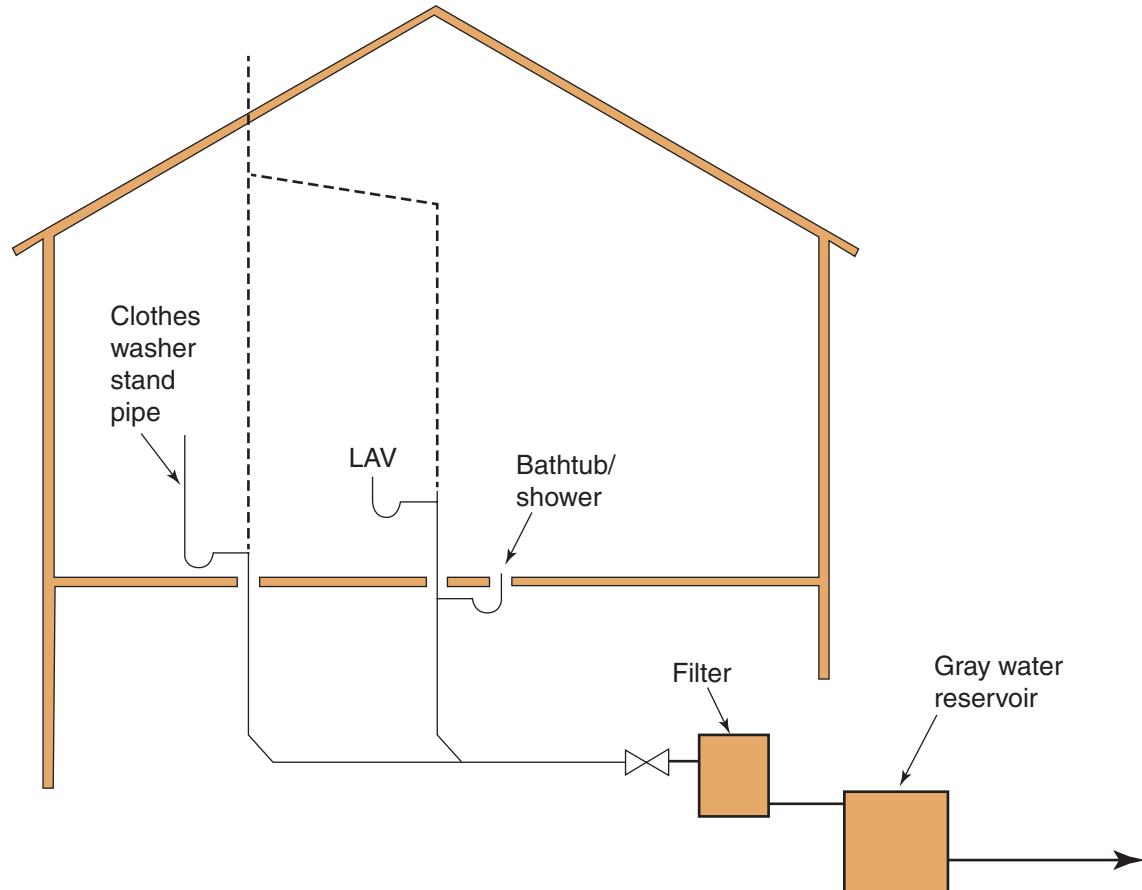
## Alternate Onsite Nonpotable Water Definition

**CHANGE TYPE:** Addition

**CHANGE SUMMARY:** This term has been added to support a revised Chapter 13 that covers how various nonpotable waters are to be collected, stored and distributed.

**2015 CODE: Alternate Onsite Nonpotable Water.** Nonpotable water from other than public utilities, onsite surface sources and subsurface natural freshwater sources. Examples of such water are graywater, on-site reclaimed water, collected rainwater, captured condensate, and rejected water from reverse osmosis systems.

**CHANGE SIGNIFICANCE:** A common problem in potable water saving designs that use nonpotable water in buildings and on building sites is the understanding and naming of the different classes of nonpotable water. The term “reclaimed water” (also known as “recycled water”) has been reserved for nonpotable water that is delivered to the building site by municipal water delivery systems (see “202, Reclaimed Water Definition” in this publication). The term “onsite nonpotable water” is too encompassing, as this means both well water that has not been treated to be potable and gray water from showers and lavatories. The handling and treatment protocols and concerns for these two sources are quite different. Thus, municipally reclaimed water, onsite surface sources and subsurface natural freshwater sources are excluded from this definition. All other onsite nonpotable water is considered alternate onsite nonpotable water.



Gray water is an example of alternate onsite nonpotable water.

**CHANGE TYPE:** Modification

**CHANGE SUMMARY:** This definition has been made more specific about what constitutes a backflow preventer: a backflow prevention assembly, a backflow prevention device or other means or methods.

**2015 CODE: Backflow Preventer.** A backflow prevention assembly, a backflow prevention device or other means or methods to prevent backflow into the potable water supply.

**CHANGE SIGNIFICANCE:** Changes made in the 2012 IPC throughout many of the potable water backflow prevention sections slightly changed the nomenclature of backflow equipment. There are now three distinct classes of backflow equipment: assemblies, devices and other means or methods. This class distinction clarifies that 1) an assembly is field testable, 2) a device is not testable in the field and 3) a means or method is observable for its adequacy to protect the potable water supply from backflow. Table 608.1 was reorganized to group backflow equipment into these three classes. This change (along with changes to Table 608.1) should make the code user more aware of the suitability of particular backflow equipment after the initial installation. In other words, if a verification of the backflow protection is needed year-after-year, either an assembly would be chosen for its field testability or other means or methods would be chosen so that installation conditions could be observed.

*202 continues*

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### Backflow Preventer Definition



Backflow prevention assembly (field testable)

202 continued



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Backflow prevention device (mop sink faucet vacuum breaker—not field testable)



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Other means or methods to prevent backflow (air gap—visually inspected)

**CHANGE TYPE:** Modification

**CHANGE SUMMARY:** The definition of a mechanical joint now includes heat-fused joints.

**2015 CODE: Mechanical Joint.** A connection between pipes, fittings, or pipes and fittings that is not screwed, caulked, threaded, soldered, solvent cemented, brazed, or welded or heat-fused. A joint in which compression is applied along the centerline of the pieces being joined. In some applications, the joint is part of a coupling, fitting, or adapter.

**CHANGE SIGNIFICANCE:** The process of heat fusing is primarily associated with the joining of certain types of plastic piping. The heat fusing process is different from the welding of piping, which generally involves the addition of filler material at the joint. Heat fusing can be performed by the butt method or the socket method. In butt heat fusing, the ends of two pipes are heated by placing them against an electrically heated plate. After a specific length of time, the plate is removed and the ends of the two pipes are brought into contact with one another in a controlled manner. The joint is allowed to cool, undisturbed. Socket heat fusion is performed by inserting the pipe into a socket of a fitting. The assembly is heated by electric-resistance heating elements embedded in the socket fitting. After a specific length of time, the heating elements are turned off, and the assembled components are left to cool, undisturbed. Heat-fused joints are not considered to be mechanical joints.



Mechanical joints

## 202

### Mechanical Joint Definition

## 202

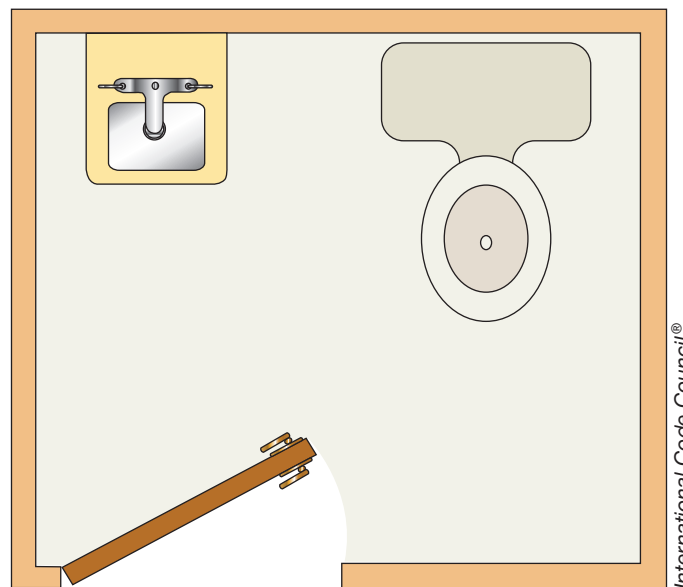
### Toilet Facility Definition

**CHANGE TYPE:** Addition

**CHANGE SUMMARY:** This definition has been added to clarify that a toilet facility is a room or space that contains not less than one water closet and one lavatory.

**2015 CODE:** **Toilet Facility.** A room or space that contains not less than one water closet and one lavatory.

**CHANGE SIGNIFICANCE:** The phrase “toilet facility” is used over 25 times in the code. The common household name for a water closet is “toilet.” Most manufacturers of water closets call the product a “toilet.” Thus, the tendency by many readers of the code is to assume that a toilet facility is a room or space that has a “toilet” (water closet). This misunderstanding can create a problem where the code requires separate (male/female) “toilet” facilities. One might incorrectly interpret this to mean that only separate (male/female) water closet compartments are required. The intent of the code is that separate (male/female) rooms or spaces that have not less than one water closet and one lavatory are required. The new definition makes this clear.



Toilet facility