

# Plumbing

## DO YOU KNOW THE Law?

**PLUMBING** - The work or business of installing in buildings and ON PREMISES the pipes, fixtures, and other apparatus for supplying water, or removing liquid waste and/or water-borne waste; and fixtures, vessels and process piping that is in direct contact with products for human consumption (NOT SEWAGE TREATMENT SYSTEMS).

**LOUISIANA STATE PLUMBING LICENSE NOT REQUIRED FOR**  
**Work done by an individual on his own**  
**PERSONAL RESIDENCE ONLY.**

**LOUISIANA STATE PLUMBING LICENSE REQUIRED FOR**

1. Any person engaging in the work of a Master or Journeyman plumber.
2. Any person engaging in the construction, installation, or "repair" of the plumbing system.  
Example: Sicensed person REQUIRED to replace Hot Water Heater, Sink Faucets, etc.

### **RELATED FACTS OF LAW :**

1. No employing entity shall hold itself out as engaging in the business or art of plumbing unless it employs a licensed master plumber.
2. A licensed journeyman plumber may not perform the art of plumbing unless they are employed by a licensed master plumber.
3. Apprentices may engage in the art of plumbing **ONLY** when they are under the **direct (One-on-one) constant, On-the-job** supervision of a **licensed journeyman plumber or licensed master plumber.**
4. **Any plumbing system shall meet the minimum safe standards as set forth in the "Louisiana State Plumbing Code" (WBICB APPLIES TO THE ENTIRE STATE OF LOUISIANA).**
5. **All advertising, along with vehicle and jobsite signs (which are Required) shall state full business name, address, telephone number and Louisiana Master Plumber's license number.**
6. **Plumbing commences at the property line.**

**PENALTY .** Violators may be fined \$500 to \$5,000 or imprisoned for not more than 90 days (or both).

**REFERENCES:** (LAW) ST. N. CODE (R-77) (L.S.C.)  
(MINIMUM STANDARDS) LA. STATE PLUMBING CODE (CHAPTER 14 OF THE LA. SANITARY CODE).

**QUESTIONS?** contact: STATE PLUMBING BOARD or Louisiana  
15041 82 6-2302

than the supply pressure, the system being above atmospheric pressure. (See also Double Check Valve Assembly, Double Check Valve with Intermediate Atmospheric Vent, and Reduced Pressure Principle Backflow Preventer).

**BACKFLOW PREVENTER** - a device to prevent backflow. As there are two conditions of backflow, the device should be identified by the conditions which it is designed to prevent. (See Back-Pressure Backflow Preventer, Reduced Pressure Principle Backflow Preventer, Back-Siphonage Backflow Preventer).

**BACK-SIPHONAGE BACKFLOW** - a reversal of the normal direction of flow in the pipeline due to a negative pressure (vacuum) being created in the supply line with the backflow source subject to atmospheric pressure.

**BACK-SIPHONAGE BACKFLOW PREVENTER, GENERAL** - a device or combination of devices for preventing back-siphonage backflow in a water supply line.

**BAROMETRIC LOOP** - a fabricated piping arrangement rising at least thirty-five (35) feet at its topmost point above the highest fixture it supplies. It is utilized in water supply systems to protect against back-siphonage.

**BY-PASS** - any system of piping or other arrangement whereby the water may be diverted around any part or portion of a water supply or treatment facility including, but not limited to, around an installed backflow preventer.

**COMMERCIAL DISHWASHER** - a mechanical dishwasher that is used in other than domestic applications.

**CONTAINMENT** - a method of backflow prevention which requires a backflow prevention device or method on the water service pipe to isolate the customer from the water main.

**CONTAMINATION** - the introduction into water of microorganisms, chemicals, toxic substances, wastes or wastewater that makes the water unfit for its intended use.

**CROSS CONNECTION** - any connection or arrangement by means of which contaminant of any kind can be caused to enter the potable water supply system.

**DEGREE OF HAZARD** - the term is derived from an evaluation of the potential risk to public health and the adverse effect of the hazard upon the potable water.

DOUBLE CHECK VALVE ASSEMBLY - an assembly of two (2) independently operating spring loaded check valves with tightly closing shut off valves on each side of the check valves, plus properly located test cocks for the testing of each check valve.

DOUBLE CHECK VALVE WITH INTERMEDIATE ATMOSPHERIC VENT - a device having two (2) spring loaded check valves separated by an atmospheric vent chamber.

DUAL CHECK VALVE - two (2) spring loaded, independently operating check valves without tightly closing shut-off valves and test cocks. Generally employed immediately down stream of the water meter. backflow prevention device.

FIXTURE ISOLATION - a method of backflow prevention in which a backflow preventer is located to correct a cross-connection at an in-plant location rather than at a water service pipe.

HOSE BIBB VACUUM BREAKER - a device which is permanently attached to a hose bibb and which acts as an atmospheric vacuum breaker.

MASTER METER - a meter serving multiple residential dwelling units. Individual units may or may not be sub-metered.

POTABLE WATER - water having bacteriological, physical, radiological and chemical qualities that make it safe and suitable for human drinking, cooking and washing uses.

POTABLE WATER SUPPLY - a publicly owned or privately owned water supply system which purveys potable water.

PRESSURE VACUUM BREAKER - a device containing one or two independently operated spring loaded check valves and an independently operated spring loaded air inlet valve located on the discharge side of the check or checks. Device includes tightly closing shut-off valves on each side of the check valves and properly located test cocks for the testing of the check valve(s).

PUBLIC WATER SYSTEM - a particular type of water supply system intended to provide potable water to the public having at least fifteen service connections or regularly serving an average of at least twenty-five individuals daily at least sixty days out of the year.

**REDUCED PRESSURE PRINCIPLE BACKFLOW PREVENTER** - an assembly consisting of two (2) independently operating approved check valves with an automatically operating differential relief valve located between the two (2) "check valves, tightly" closing shut-off valves on each side of the check valves plus properly located test cocks for the testing of the check valves and relief valves.

**WATER SERVICE PIPE (or SERVICE CONNECTION)** - the pipe from the water main and/or water meter, water supply system or other approved source of water supply, to the building or structure served.

**WATER SUPPLIER** - a person who owns or operates a water supply system including, but not limited to, a person who owns or operates a public water system.

**WATER SUPPLY SYSTEM** - the system of pipes or other constructed conveyances, structures, and facilities through which water is obtained, treated to make it potable (if necessary), and then distributed (with or without charge) for human drinking, cooking, washing, or other use.

**0103 AIR GAPS:** The provision of air gaps shall be required for backflow prevention in any and all cases where such a measure is the most practical that can be employed. The "minimum required air gap (water distribution)" shall be in accord with MME A 1 J 2.1.2.'

Note:

1. For informational purpose only, ASME A 12.1.2 generally requires a minimum required air gap equal to two times the effective opening for 3 times the effective opening if affected by a nearby wall). Compliance shall be strictly determined by the provisions contained within the standard itself.

**CONTAINMENT PRACTICES:** Backflow prevention methods or devices shall be utilized as directed by the Plumbing Official to isolate specific water supply system customers from the water supply system's mains when

such action is deemed necessary to protect the water supply system against potential contamination caused by backflow of water from that part of the water system owned and maintained by the customer (e.g., the piping downstream of the water meter, if provided).

As a minimum, the following types of devices or methods shall be installed and maintained by water supply system customers immediately downstream of the water meter (if provided) or on the water service pipe prior to any branch line or connections serving the listed customer types and categories:

TABLE 0104 '1

Air Gap	
1.	Fire Protection/Sprinkler System utilizing non-potable water as an alternative or primary source of water
Reduced Pressure Principle Backflow Preventer	
1.	Hospitals, Out-Patient Surgical Facilities, Renal Dialysis Facilities, Veterinary Clinics
2.	Funeral Homes, Mortuaries
3.	Car Wash Systems
4.	Sewage Facilities
5.	Chemical or Petroleum Processing Plants
6.	Animal/Poultry Feedlots or Brooding Facilities
7.	Meat Processing Plants
8.	Metal Plating Plants
9.	Food Processing Plants, leverage Processing Plants
10.	Fire Protection/Sprinkler Systems using antifreeze in such system
11.	Marinas/Docks
12.	Radiator Shops
13.	Commercial Pesticide/Herbicide Applicators
14.	Photo/X-ray/Film Processing Laboratories
Double Check Valve Assembly	
1.	Fire Protection/Sprinkler Systems
2.	Multiple Residential Dwelling Units served by a master meter.
3.	Multistoried Office/Commercial Buildings (over 3 floors)
4.	jails, Prisons, and Other Places of Detention or Incarceration

Note:

1. Other Containment Practices - Table D104 is not inclusive of all potential contamination sources which may need containment protection. For potential contamination sources not listed in this table, backflow prevention methods or devices shall be utilized as directed by the Plumbing Official [or by the water supplier for those devices which may be associated with the water supplier's own water supply system located on public property or otherwise under the complete control of the water supplier (e.g., water meter and the piping upstream of the water meter, if provided)].

D105.1 FIXTURE ISOLATION PRACTICES: Water supply system customers shall provide and maintain backflow prevention methods or devices as directed by the Plumbing Official within that part of the water system owned and maintained by the customer (e.g., the piping downstream of the water meter, if provided, or downstream from any containment devices to protect the on-site users of the water system against potential contamination due to backflow.

0105.2 As a minimum, the following types of devices or methods shall be employed as appropriate for the following points of usage:

TABLE D 105" "

Air Gap	
1.	Cooling Towers
2.	Chemical Tanks
3.	Commercial Dishwashers in commercial establishment
4.	Ornamental Fountains
5.	Swimming Pools, Spas, Hot Tubs
6.	Baptismal Fonu
7.	Animal Watering Troughs
8.	Agricultural Chemical Mixing Tanks
9.	Water Hauling Tanks
Reduced Pressure Principle Backflow Preventers	
1.	Commercial Boilers
2.	Air Conditioning, Chilled Water Systems
3.	Air Conditioning, Condenser Water Systems
4.	Pot-type Chemical Feeders
5.	Lawn Sprinklers with Fertilizer Injection
6.	Photo/X-ray/Film Processing Equipment
Double Check Valve Assembly	
1.	Food Processing Steam Kettles
2.	Individual Travel Trailer Sites

TABLE 0105" ' (Continued)

Atmospheric or Pressure Type Vacuum Breakers	
1.	Laboratory and/or Medical Aspirators
2.	Flushing Rim Bedpan Washers
3.	Garbage Can Washers
4.	Laboratory or Other Sinks with threaded or serrated nozzles
5.	Flushometer Operated Fixtures
6.	Commercial Washing Machines
7.	Lawn Sprinklers
8.	Hose Bibbs
9.	Commercial Dishwashers in commercial establishment

Notes:

1. See Tables G104.6 and G104.7 for fixture isolation practices in hospital plumbing systems.
2. Other Fixture Isolation Practices - Table D105 is not inclusive of all potential contamination sources which may need fixture isolation protection. For potential contamination sources not listed in this table, backflow prevention methods or devices shall be utilized as directed by the Plumbing Official.

0106 RESPONSIBILITY OF WATER SUPPLIERS: Water suppliers shall be responsible to insure the protection of the water supply system from potential contamination from certain of their customers through containment practices as prescribed by this Chapter or as otherwise directed by the State Health Officer.

#### 0107 BYPASSES

0107.1 All bypasses shall have the same level of backflow protection as the main water supply line.

#### 0108 MAINTENANCE/FIELD TESTING

0108.1 Types of Backflow Preventers to be Field Tested  
0108.1.1 To ensure that installed backflow preventers provide continuing backflow protection, the following types of backflow preventers shall be checked and field tested in accordance with the frequency established in D108.2 by a Backflow Prevention Assembly Tester who meets ASSE 5000 Professional Qualification Standard, or other individuals holding a testing

certificate from a nationally recognized backflow certification organization approved by the Plumbing Official [or found acceptable to the water supplier for those devices which may be associated with the water supplier's own water supply system located on public property or otherwise under the complete control of the water-supplier (e.g., water meter and the piping upstream of the water meter, if provided)]<sup>1</sup>:

- (a) double check valve assemblies;
- (b) reduced pressure principle backflow preventers;
- (c) pressure type vacuum breakers;
- (d) air gaps on high hazard applications; and,

her as otherwise specified by the Plumbing Official (or by the water supplier for those backflow preventers located on public property or otherwise under the complete control of the water supplier (e.g., water meter and piping upstream of the water meter, if provided)).

It is recommended that other types of backflow prevention devices be visually checked periodically.

0108.1.2 Any backflow preventer in D108.1 .1 which is found defective shall be repaired by a duly authorized water supply protection specialist licensed by the Louisiana State Plumbing Board pursuant to LSA - R.S. 37:1361 et seq and implementing regulations (LSA 46: LV.101 et seq) or, for those backflow preventers located on public property or otherwise under the complete control of the water supplier (e.g., water meter and the piping upstream of the water meter, if provided), by a Backflow Prevention Assembly Repairer who meets ASSE 5030 Professional Qualification Standard or other individuals found acceptable to the water supplier.

#### Frequency of Field Testing

The backflow prevention devices specified in D108.1 .1 shall be field tested:

- (a) upon installation;
- (b) when cleaned, repaired, or overhauled;
- (c) when relocated;
- (d) annually; and
- (e) as required by the Plumbing Official (or by the water supplier for those

backflow preventers located on public property or otherwise under the complete control of the water supplier (e.g., water meter and piping upstream of the water meter, if provided)).

#### Owner Responsibilities

D108.3.1 It shall be the duty of the owner of the backflow preventer to see that these tests are made in a timely manner in accord with the frequency of field testing specified in D108.2.

0108.3.2 The owner shall notify the Plumbing Official and/or water supplier in advance when the tests are to be undertaken so that the Plumbing Official and/or water supplier may witness the tests if so desired.

D108.3.3 All tests, repairs, overhauls, or replacements shall be at the expense of the owner of the backflow preventer.

D100.3.4 All records of such tests, repairs, overhauls, or replacements shall be kept by the owner of the backflow preventer for at least 5 years and upon request, shall be made available to the Plumbing Official, water supplier, and/or the State Health Officer.

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