

RHODE ISLAND

STATE BUILDING CODE

SBC-3 State Plumbing Code

Effective July 1, 2013



STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS

**Department of Administration
BUILDING CODE STANDARDS COMMITTEE
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11th edition

Regulation SBC-3
State Plumbing Code
July 1, 2013

The Building Code Standards Committee, in accordance with the rule making authority of Title 23, Chapter 23-27.3, Section 109.1, paragraphs a through c inclusive, has formally adopted and promulgated as the Rhode Island State Building Code, the provisions of the International Plumbing Code, 2012 edition, as published by the International Code Council, Inc. (I.C.C.), together with amendments thereto hereinafter set forth to the articles and sections of this code:

The provisions of Title 23, Chapter 27.3 of the General Laws of Rhode Island establishing administration and enforcement are hereby incorporated by reference. Regulatory Administration Chapter 1 immediately follows and is supplemental to the General Laws.

Editorial Note: Code users please note:

When purchasing or using the Plumbing 2009 code, please take note of the particular printing edition. Errata to that printing edition is available on-line directly at no charge at www.iccsafe.org/cs/codes/pages/errata.aspx or call the office of the State Building Code Commissioner at 401-222-1129 for further information.

Printed copies of the administrative and enforcement provisions of Title 23, Chapter 27.3 are available at the Office of the State Building Code Commission or on-line at <http://www.rilin.state.ri.us/Statutes/TITLE23/23-27.3/INDEX.HTM>.

The International Plumbing Code, 2012 Edition, is protected by the copyright that has been issued to the ICC. As a result, the State Building Code is not available in complete form to the public in an electronic format. The International Plumbing Code 2012 edition that is referred to within is contained in a printed volume and is also in an electronic format that have been published by the ICC under an exclusive license.

The Office of the State Building Code Commissioner has purchased volumes of these codes and they shall be distributed to Rhode Island cities and towns during the month of June 2013 so that local officials will have access to the code prior to the implementation of these rules on July 1, 2013.

In order to assure public access to this code the Office of the State Building Code Commissioner shall provide a copy of this code to the Rhode Island State Library, which is located on the second floor of the State House. In addition, all codes may be viewed during business hours at the Department of Administration's Library which is located on the fourth floor of the William E. Powers Building, One Capitol Hill, Providence.

The Legislative Regulation Committee approved adoption of this code on July 1, 2013

By:

John P. Leyden

Executive Secretary

Rhode Island Building Code Standards Committee

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STATE BUILDING CODE REGULATIONS - 2013

The following list includes all regulations promulgated by the State Building Code Standards Committee. All regulations are available for a fee at the State Building Commission.

1.	Building Code	SBC-1-2013
2..	One and Two Family Dwelling Code	SBC-2-2013
3.	Plumbing Code	SBC-3-2013
4.	Mechanical Code	SBC-4-2013
5.	Electrical Code	SBC-5-2011
6.	Property Maintenance Code	SBC-6-2013
7.	Reserved	
8.	Energy Conservation Code	SBC-8-2013
9	Enforcement and Implementation Procedures for Projects Under the Jurisdiction of The State of Rhode Island	SBC-9
10.	Code Interpretations	SBC-10
11.	Certification of Building Officials, Building, Electrical, Plumbing and Mechanical Inspectors	SBC-11-2010
12.	New Materials and Methods of Construction	SBC-12
13.	State Building Code for Existing Schools	SBC-13
14.	Reserved	
15.	Reserved	
16.	Reserved	
17.	Public Buildings Accessibility Meeting Standards	SBC-17
18.	Native Lumber	SBC-18
19.	Fuel Gas Code	SBC-19-2013
20.	The State of Rhode Island Rehabilitation Building and Fire Code for Existing Buildings and Structures	SRC-1-2002

Chapter 1
ADMINISTRATON

Delete IPC section 101.1, Title, and substitute the following:

101.1 Title.

These regulations shall be known as the Rhode Island State Plumbing Code Regulation SBC-3 – 2013 hereafter referred to as "this code".

Add the following new section 101.1.1 Referenced Codes.

101.1.1 Referenced Codes.

The other codes referenced elsewhere in this code shall be considered part of the requirements of this code to the prescribed extent of each such reference.

1. **Electrical.** The provisions of Rhode Island State Electrical Code SBC-5-2011 shall apply wherever referenced in this code as the ICC Electrical Code, and shall apply to the installation of electrical systems, including alterations, repairs, replacement, equipment, appliances, fixtures, fittings, and appurtenances thereto.
2. **Mechanical.** The provisions of the Rhode Island State Mechanical Code SBC-4-2013 shall apply wherever referenced in this code as the International Mechanical Code and shall apply to the installation, alterations, repairs and replacement of mechanical systems, including equipment, appliances, fixtures, fittings and/or appurtenances, including ventilating, heating, cooling, air-conditioning and refrigeration systems, incinerators and other energy-related systems.
3. **Plumbing.** The provisions of Rhode Island State Plumbing Code SBC-3-2013 shall apply wherever referenced in this code as the International Plumbing Code, and shall apply to the installation, alteration, repair and replacement of plumbing systems, including equipment, appliances, fixtures, fittings and appurtenances, and where connected to a water or sewage system and all aspects of a medical gas system
4. **Property Maintenance.** The provisions of the Rhode Island State Property Maintenance Code SBC-6-2013 Provides requirements for continued use and maintenance buildings and property, and of related plumbing, mechanical, electrical and fire protection systems in existing residential and non-residential structures.
5. **Fire Prevention Code.** Wherever and whenever provisions of the International Fire Code 2012 editions are referenced, the appropriate Rhode Island Fire Safety Code requirements shall apply.

6. **Energy.** The provisions of the Rhode Island State Energy Code SBC-8-2013 shall apply wherever referenced in this code as International Energy Conservation Code, and shall apply to all matters governing the design, alterations and construction of buildings and systems for energy efficiency.
7. **Building Code.** The provisions of the Rhode Island State Building Code SBC-1-2013 shall apply wherever referenced in this code as the International Building Code.
8. **Residential Code.** The provisions of the Rhode Island One and Two Family Dwelling Code SBC-2-2013 shall apply wherever referenced in this code as the International Residential Code.
9. **Existing Building Code.** The provisions of the Rhode Island State Building Code SBC-1-2013 in conjunction with the State Rehabilitation Code SRC-1 and the Rhode Island Fire Safety Code shall apply wherever referenced in this code as the International Existing Building Code.

Delete IPC Sections 102.8, 103, 104, 106.4 through 106.6.3, 108 and 109 and refer to the appropriate sections of SBC-1-2013 and RIGL 23-27.3-100 et al.

102.10 Contractor's responsibilities. It shall be the duty of every contractor who enters into contracts for the installation or repair of plumbing systems for which a permit is required to comply with adopted state and local rules and regulations concerning licensing.

Any building owner, authorized agent, person or contractor who installs, modifies or repairs plumbing systems for which a permit is required shall comply with all state laws and regulations regarding licensing.

Chapter 3
General Regulations

Add the following section to IPC section 301.4

301.4.1 Prohibited Connections. The use of potable water as an open loop, single pass heat exchange fluid for the refrigeration cycle of HVAC equipment is prohibited.

Delete IPC section 305.6.1 and substitute the following

305.6.1 Sewer Depth: Building sewers that connect to private sewage disposal systems shall meet the requirements of the Department of Environmental Management's Regulations for Onsite Sewage Waste Water Treatment Systems. Building sewers connecting to a public sewer shall be a minimum of 36" inches below grade.

Delete IPC section 312.1 and substitute the following:

312.1. Required Tests: The permit holder shall make the applicable tests prescribed in Sections 312.2 through 312.9 to determine compliance with the provisions of this code. The permit holder shall give reasonable advance notice to the code official when the plumbing work is ready for tests. The equipment, material, power and labor necessary for the inspection and test shall be furnished by the permit holder and the permit holder shall be responsible for determining that the work will withstand the test pressure prescribed in the following tests. All plumbing system piping shall be tested with either water or air in accordance with sections 312.3 or 312.5. Under no circumstances is plastic to be tested with air pressure above 5 psi. After the plumbing fixtures have been set, their traps filled with water, the entire drainage system shall have been subjected to testing. The code official shall require the removal of any cleanouts if necessary to ascertain whether the pressure has reached all parts of the system.

Chapter 6
Water Supply and Distribution

Add the following sections to section 601 General:

601.5 Water Meters: Every building connected to a public metered water supply shall have a water meter installed before a Certificate of Occupancy is issued.

601.6 Individual Water Supply: An individual water supply serving an occupied building shall be tested and certified potable prior to issuance of a temporary or permanent certificate of occupancy.

601.7 Public Water Supply: Any water supply serving at least twenty-five (25) individuals at least sixty days (60) out of the year, or having fifteen (15) or more service connections may be subject to approval and licensure by the Rhode Island Department of Health as per the Rules and Regulations Pertaining to Public Drinking Water [R-46-13-DWQ].

Delete IPC 603.2 and substitute the following:

603.2 Separation of water service and building drain/sewer. Water service pipe and building drain/sewer shall be separated by 10 feet (3048mm) of undisturbed or compacted earth.

Exceptions:

1. The required separation distance shall not apply where the bottom of the water service pipe within 10 feet (3048mm) of the sewer is a minimum of 12 inches (305 mm) above the top of the highest point of the sewer and the pipe materials conform to Section 703.1.
2. Water service pipe is permitted to be located in the same trench with a building drain, provided such drain is constructed of materials listed in Table 702.2
3. The required separation distance shall not apply where a water service pipe crosses a sewer pipe provided the water service pipe is sleeved at least 10 feet (3048 mm) with a watertight seal horizontally from the sewer pipe centerline, on both sides of such crossing with pipe materials listed in Table 605.3, Table 702.2 or Table 702.3.

Delete IPC Table 608.17.1 and substitute the following:

**TABLE 608.17.1
DISTANCE FROM SOURCES OF CONTAMINATION TO
PRIVATE WATER SUPPLIES AND PUMP SUCTION LINES**

Source of Contamination	Distance (feet) ^{a, b}
Sewer	50
Septic Tank	50
Pasture	100
Sewer (leaded or mechanical joints or approved plastic)	10
Subsurface pits	100 ^c
Seepage pits	100
Cesspools	100
Barnyard	100
Farm silo	25
Pump house floor drain of cast iron draining to ground surface	2

Note a. 1 foot=304.8mm

Note b These distances constitute minimum separation and shall be increased in areas of crevice rock or limestone, or where the direction of the ground water is from sources of contamination toward the well. These distances shall be increased as required by the Rhode Island Department of Environmental Management, Division of Land Resources (SDS Regulations or local zoning ordinances).

Note c. When approved by the authority having jurisdiction and under special soil conditions, this distance may be reduced; however, a minimum separation of not less than 50 feet shall be maintained.

Chapter 7

Sanitary Drainage

Delete IPC 701.2 and substitute the following:

701.2 Sewer required. Every building in which plumbing fixtures are installed and all premises having drainage piping shall be connected to a public sewer in accordance with the authority having jurisdiction where available, or an approved private sewage disposal system.

Delete IPC Section 701.5 and substitute the following:

701.5 Damage to drainage system or public sewer. Wastes detrimental to the public sewer system or detrimental to the functioning of the individual private sewerage disposal system shall be treated and disposed of in accordance with Section 1003 as directed by the code official and in accordance with the authority having jurisdiction.

Delete IPC section 703.1 and substitute the following:

703.1 Building sewer pipe near the water service. Where the *building sewer* is installed within 10 feet (3048mm) of the water service, the installation shall comply with the provisions of Section 603.2.

Delete IPC section 715.5 and substitute the following:

715.5 Location. Backwater valves shall be installed so that access is provided to the working parts for service and repair in accordance with the authority having jurisdiction.

Chapter 8

Indirect/Special Waste

Add the following exception to IPC section 802.1.1.

Exception: Three-bay sinks served by a grease trap or receptor shall be permitted to be direct connected. This may require an additional vegetable washing sink with indirect waste and must have approval of the Rhode Island Department of Health for licensing of food handling facilities.

Delete IPC section 802.1.4 and substitute the following:

802.1.4 Swimming pools. Where wastewater from swimming pools, backwash from filters and water from pool deck drains discharge to the building drainage system, the discharge shall be through an indirect waste pipe by means of an air gap and have approval of the authority having jurisdiction.

Delete Section 802.1.8 entirely and add the following

802.1.8 Food utensils, dish, pots and pans sinks. Sinks used for the washing, rinsing or sanitizing of utensils, dishes, pots, pans or service ware used in the preparation, serving or eating of food shall discharge indirectly through an *air gap* or an *air break* or directly connect to the drainage system

802.2 Installation. Indirect waste piping shall discharge through an air gap or ari break into a waste receptor. Waste receptors and standpipes shall be trapped and vented and shall connect to the drainage system. All indirect waste piping that exceeds 30 inches (762mm) in developed length measured horizontally, or 54 inches (1372 mm) in total developed length shall be trapped.

Delete just Exception

Add the following new section:

803.4 Reverse osmosis waste: Discharge piping from reverse osmosis water shall be in accordance with the manufacturers' installation instructions.

Chapter 9

Vents

903.1 Roof extension insert the following.

(12) inches (304.8mm)

Delete IPC section 9043.2 and substitute the following:

903.2 Frost Closure: Each vent extension through a roof shall have a minimum size of 3" in Providence County and 2" in all others. Where this results in an increase in size of the vent extension, the change in diameter shall be made inside the building a minimum of 6" below the roof with an approved fitting.

Chapter 10

Traps

Delete IPC section 1002.4 and substitute the following:

1002.4 Trap seals. Each fixture trap shall have a liquid seal of not less than 2 inches (51mm) and not more than 4 inches (102 mm), or deeper for special designs relating to accessible fixtures. Where a trap seal is subject to loss by evaporation, a deeper seal trap consisting of a minimum 4-inch (102mm) seal or a trap seal primer valve shall be installed. A trap seal primer valve shall conform to ASSE 1018 or ASSE 1044. Alternative Seals that are in conformance with ASSE 1018 or ASSE 1044 are acceptable.

Delete IPC section 1003.1 and substitute the following:

1003.1 Interceptors required. Interceptors for oil grease, and sand and other substances harmful or hazardous to the building drainage system, the public sewer or sewage treatment plant or processes shall be provided as required by this chapter. Where food waste grinders connect to grease interceptors, the grease interceptor shall be sized and rated for the discharge of the food waste grinder. All interceptors shall be installed in accordance with the rules of the authority having jurisdiction.

Delete IPC section 1003.2 and substitute the following:

1003.2 Approval. The size, type and location of each interceptor and of each separator shall be designed and installed in accordance with the manufacturer's instructions and the requirements of this section based on the anticipated conditions of use. Wastes that do not require treatment or separation shall not be discharged into any interceptor or separator. All separators shall be sized and installed in accordance with the authority having jurisdiction.

Chapter 11

Storm Drainage

Delete IPC Figure 1106.1 and utilize a Rhode Island rainfall rate of 2.6 inches per hour for all the Rhode Island except for Block Island which shall use a rainfall rate 2.7 inches per hour.

Add the following new section:

1108.2 Approvals. All combined drains and sewer systems must have the approval of the local or regional sewer authority having jurisdiction.

Delete Appendices A, B

Appendix C may only be utilized when specifically permitted by a local or regional sewer authority having jurisdiction, or the Rhode Island Department of Environmental Management for individual sewage disposal system.

Appendix D is deleted and refer to the Rhode Island Mechanical Code and Rhode Island Energy Conservation Code.

Appendices E, F and G remain.