

RHODE ISLAND  
STATE BUILDING CODE

**Regulation SBC-3 - 2004**  
**State Plumbing Code**  
**July 1, 2004**

Replaces Regulation SBC-3  
Dated September 1, 2002



STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS

Department of Administration  
BUILDING CODE STANDARDS COMMITTEE  
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8<sup>TH</sup> edition

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The Building Code Standards Committee, in accordance with the rule making authority of Title 23 Chapter 23-27.3, Section 109.1 paragraph a through c inclusive, hereby adopts the provisions of the International Plumbing Code 2003 edition, as published by the International Code Council, Inc., as the Rhode Island State Plumbing Code, together with the amendments thereto hereinafter set forth to the chapters and sections of said 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. The regulatory administration chapter of the Rhode Island State Plumbing Code is supplemental to those General Laws and in the event of conflicts, the provisions of General Law shall prevail.

*Editorial Note: Code users please note:*

*When purchasing or using the IPC 2003 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/errata.html](http://www.iccsafe.org/cs/codes/errata.html) or call the office of the State Building Code Commissioner at 401-222-3033 for further information.*

*The International Plumbing Code, 2003 Edition, is protected by the copyright that has been issued to the ICC. As a result, the State Plumbing Code is not available in complete form to the public in an electronic format. The International Plumbing Code 2003 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 2004 so that local officials will have access to the code prior to the implementation of these rules on July 1, 2004.*

*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 ground floor of the William E. Powers Building, One Capitol Hill, Providence.*

*The Legislative Regulation Committee approved adoption of this code on April 21, 2004.*

*By:  
Daniel R. DeDentro  
Executive Secretary  
Rhode Island Building Code Standards Committee  
May 19, 2004*

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STATE BUILDING CODE REGULATIONS – 2004

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-1-2004
2.	One and Two Dwelling Family Dwelling Code.....	SBC-2-2004
3.	Plumbing Code.....	SBC-3-2004
4.	Mechanical Code.....	SBC-4-2004
5.	Electrical Code.....	SBC-5-2002
6.	<b>Reserved</b> .....	SBC-6
7.	<b>Reserved</b> .....	SBC-7
8.	State Energy Code.....	SBC-8-2004
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-11-2002
12.	New Materials and Methods of Construction.....	SBC-12
13.	State Building Code For Existing Schools.....	SBC-13
14.	<b>Reserved</b>	
15.	<b>Reserved</b>	
16.	<b>Reserved</b>	
17.	Public Buildings Accessibility Meeting Standards.....	SBC-17
18.	Native Lumber.....	SBC-18
19.	Fuel Gas Code.....	SBC-19-2004

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Format: These Code changes follow numbering sequence and topics of INTERNATIONAL PLUMBING CODE 2003 (first printing). All Provisions of IPC 2003 are retained unless indicated as deleted or revised. Published errata is available from the ICC website dependent on the printing issue number and date.

**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 – 2004 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-5-2004 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-4-2004 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. Property Maintenance.** Refer to state or local codes.
  - 4. Fire Prevention Code.** The provisions of the International Fire Code 2003 Edition shall apply when this code directly references a section or requirement. These cross-references are not intended to impose any enforcement requirements on state and local fire officials, and any conflicts with the State Fire Safety Codes shall be resolved in favor of the stricter standard, and that standard shall be enforced by the appropriate designated authority having jurisdiction.
  - 5. Energy.** The provisions of the Rhode Island State Energy Code SBC-8-2004 shall apply wherever referenced in this code as International Energy Conservation

Code, and shall apply to all matters governing the design and construction of buildings for energy efficiency.

- 6. **Building Code.** The provisions of the Rhode Island State Building Code SBC-1-2004 shall apply wherever referenced in this code as the International Building Code.
- 7. **Residential Code.** The provisions of the Rhode Island One and Two Family Dwelling Code SBC-2-2004 shall apply wherever referenced in this code as the International Residential Code.
- 8. **Existing Building Code.** The provisions of the Rhode Island State Building Code SBC-1-2004 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-1-2004 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 and substitute the following:

**305.6 Freezing:** Water service shall be installed below recorded frost penetration but not less than four feet six inches below grade. In climates with freezing temperatures, plumbing piping in exterior building walls or areas subjected to freezing temperatures, shall be protected against freezing by insulation or heat or both.

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 Individual Sewage Disposal 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 and their traps filled with water, the entire drainage system shall be submitted to final tests. The code official shall require the removal of any cleanouts if necessary to ascertain whether the pressure has reached all parts of the system.

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#### Chapter 4

##### **Fixtures, Faucets and Fixture Fittings**

Delete IPC section 417.3 and substitute the following:

**417.3 Shower waste outlet.** Waste outlets serving showers shall be at least 2 inches ( 51 mm) in diameter and for other than waste outlets in bathtubs, shall have removable strainers not less than 3 inches (76 mm) in diameter with strainer openings not less than 0.25 inch (6.4 mm) in minimum dimension. Where each shower space is not provided with an individual waste outlet, the waste outlet shall be located and the floor pitched so that waste from one shower does not flow over the floor area serving another shower. Waste outlets shall be fastened to the waste pipe in an approved manner.

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**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.

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 sewer, provided such sewer 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) <sup>a, b</sup>
Sewer	50
Septic Tank	50
Pasture	100
Sewer (leaded or mechanical joints or approved plastic)	10
Subsurface pits	100 <sup>c</sup>
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.

Amend IPC Table 702.2 by adding the following material:

MATERIAL	STANDARD
Ductile iron	A746

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.

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**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.

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.

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## Chapter 9

### **Vents**

Delete IPC section 904.2 and substitute the following:

**904.2 Frost Closure:** Each vent extension through a roof shall have a minimum size of 2". 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.

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**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.

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.



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## Chapter 11

### **Storm Drainage**

Delete IPC Figure 1106.1 and utilize a Rhode Island rainfall rate of 2.6 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.

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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.