

RHODE ISLAND STATE BUILDING CODE

**Plumbing Code
Regulation SBC-3
September 1, 2002**

**Replaces Regulation SBC-3-98
Dated April 1, 1998**



STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS

**Department of Administration
BUILDING CODE STANDARDS COMMITTEE
One Capitol Hill
Providence, Rhode Island 02908-5859
(401) 222-3033
FAX NO. (401) 222-2599**

7th EDITION

State Plumbing Code
Regulation SBC-3
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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 2000 edition, as published by the International Code Council, Inc., as the Rhode Island Plumbing Code, together with the amendments thereto hereinafter set forth to the chapters and sections of said code:

PLUMBING CODE

Format: These Code changes follow numbering sequence and topics of INTERNATIONAL PLUMBING CODE 2000(first printing). All Provisions of IPC 2000 are retained unless indicated as deleted or revised. Published_errata will be incorporated into the final documents.

Chapter 1

ADMINISTRATION

The following Rhode Island amendments are made to the sections of Chapter 1:

Revise section 101.1, Title, to read as follows:

101.1 Title. These regulations shall be known as the Plumbing Code Regulation SBC-3, Hereafter referred to as “this code”.

101.2 Delete and substitute the following

101.2....shall be regulated by the Rhode Island Fuel Gas Code.

Delete I.P.C . Sections 102 through 109.7, except retain the provisions of Sections P-102.2, P-102.3, P-102.4, P-106.2 and P-107.1 through P-107.6

102.10 add this section

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.

Chapter2

Definitions

201.3 Delete and substitute the following

201.3.....are defined in the Rhode Island Building Code, International Fire Code, Rhode Island Electrical Code, Rhode Island Fuel Gas Code, Rhode Island Energy Code or the Rhode Island Mechanical Code, such....

Chapter 3

General Regulations

301.4.1 add this section

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.

301.7 add this section

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

305.6 delete 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.

305.6.1 delete 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.

308.6 delete and substitute the following

308.6 Sway bracing. Rigid support sway bracing shall be provided at changes in direction greater than 45 degrees(.79 rad.) for pipe size 4 inches (102mm) and larger, except for Residential R-3 and R-4 use groups as defined in SBC-1-98.

308.7 delete and substitute the following

308.7 Anchorage. Anchorage shall be provided to restrain drainage piping from axial movement except for Residential R-3 and R-4 use groups as defined in SBC-1-98.

Chapter 4

Fixtures, Faucets and Fixture Fittings

409.3.2 add the following

409.3.2....Section 802.2. Dishwasher may discharge into floor drain if within 5 feet horizontally of drain, not more than one floor above, no tripping hazard is created, and located on sewer side of building.

Chapter 5

Water Heaters

502.1 delete and substitute the following

502.1...Rhode Island Mechanical Code...Rhode Island Electrical Code....
Rhode Island Fuel Gas Code.

502.6 delete and substitute the following:

502.6...Rhode Island Building Code...

504.3 delete and substitute the following:

504.3 ...Rhode Island Electrical Code.

504.7 delete and substitute the following:

504.7 Safe waste. A safe waste shall be installed under a water heater, 6 gallon capacity or larger, that is elevated above the basement where there is occupancy below and shall be piped indirectly to a proper open fixture or stand pipe properly trapped and vented. The safe waste pan shall be at least 2" deep and shall have a 2" minimum clearance around the tank. The relief valve shall not discharge into the pan but shall discharge into the drain of the safe waste. Minimum size waste pipe shall be 1" for a distance of 1' where the size shall increase to a minimum size of 1 1/4" to accept the relief valve discharge. Where floor drains and other acceptable points of indirect discharge are installed no safe waste shall be required.

Chapter 6

Water Supply and Distribution

603.2 delete 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.

Exception: The required separation distance shall not apply where the bottom of the water service pipe within 10 feet (3048 mm) of the building drain/sewer is a minimum of 12 inches (305mm) above the top of the highest point of the building drain/sewer and the pipe materials conform to Section 702.2 or Section 702.3.

605.16.2 exception - delete without substitution

607.2 delete and substitute the following:

607.2...Rhode Island Energy Code.

607.2.1 delete and substitute the following:

607.2.1 Piping insulation. Piping in required return circulation shall be insulated in accordance with 504.5 of the Rhode Island Energy Code.

608.16.1 delete and substitute the following:

608.16.1... a double check valve with an intermediate atmospheric vent conforming to ASSE 1022.

608.17.1 delete 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) b
Sewer	50
Septic Tank	50
Pasture	100
Sewer of cast iron (leaded or mechanical joints or approved plastic)	10
Subsurface pits	100c
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 creviced rock or limestone, or where the direction of the ground water is from sources of contamination toward the well. These distances shall also 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

701.1 delete and substitute the following:

701.1 Scope. The provisions of this chapter shall govern the materials, design, construction, and installation of sanitary drainage systems.

701.2 delete and substitute the following:

701.2...in accordance with the authority having jurisdiction.
701.2 add the following new subsection:

701.2.1 Public systems Available: A public water system and or public sewer shall be deemed available to premises used for human occupancy when so determined by the rules and regulations of either the state, regional, or local authority having jurisdiction.

Table 702.2 add the following:

Table 702.2	MATERIAL	
	Ductile iron	A746

701.5 delete 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 sewage-treatment plant shall be treated and disposed of in accordance with Section 1003 and in accordance with the authority having jurisdiction.

715.5 delete 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

802.1.1 add the following.

802.1.1 Exception: Three bay sinks connected to 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 Department of Health

802.1.4 add the following:

802.1.4...an air gap and have approval of authority having jurisdiction.

803.4 add the following new Section:

803.4 Reverse osmosis waste: Discharge piping from reverse osmosis water shall be with PB or PE pipe and fittings in accordance with the manufacturers' installation instructions.

Chapter 9

Vents

904.2 delete 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.

Chapter 10

Traps

1003.1 delete 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 authority having jurisdiction.

1003.4 add the following:

1003.4 All separators shall be installed in accordance with the authority having jurisdiction.

Chapter 11

Storm Drainage

Delete without substitution

Figure 1106.1 pages 79, 80, 81, 82, 83

Table 1106.2 Interpolate and use the rainfall rate of 2.6 inches per hour.

Table 1106.3 Delete and substitute the following Table 1106.3:

TABLE 1106.3
SIZE OF HORIZONTAL BUILDING STORM DRAINS
AND BUILDING STORM SEWERS

Maximum projected area in square feet ^b Gallons per minute flow for various slopes						
Diameter of drain inches	1/8 in. per ft. slope		1/4 in. per ft. slope		1/2 in. per ft. slope	
	sq. ft. ^a	gpm	sq. ft. ^a	gpm	sq. ft. ^a	gpm
3	1265	34	1785	48	2529	68
4	2892	78	4077	110	5785	156
5	5138	139	7262	195	10277	278
6	8231	222	11615	314	16462	445
8	12692	478	25077	677	35385	956
10	31846	800	44923	1214	63692	1721
12	51231	1384	72308	1953	102462	2768
15	91538	2473	129231	3491	183077	4946

Note a: Table 1106.3 based upon Rhode Island rainfall at 2.6 inches per hour.

Note b: 1 inch per foot = 0.833mm/m; 1 sq. ft. = 0.993m²; 1 gallon per minute = 3.781/m.

Table 1106.6 Delete and substitute the following Table 1106.6.

TABLE P-1106.6
SIZE OF SEMICIRCULAR ROOF GUTTERS

Maximum of projected roof area for Gutters of various slopes ^c								
Diameter of gutter ^b inches	1/16 in per ft. slope		1/8 in. per ft. slope		1/4 in. per ft. slope		½ in. per ft. slope	
	sq. ft. ^a	gpm	sq. ft. ^a	gpm	sq. ft. ^a	gpm	sq. ft. ^a	gpm
3	680	262	960	369	1360	523	1920	738
4	1440	554	2040	785	2880	1108	4000	1569
5	2500	962	3520	1354	5000	1923	7000	2723
6	3810	1477	5440	2092	7000	2954	11000	4262
7	5520	2123	7000	3000	11010	4246	15600	6000
8	7960	3062	11200	4308	14400	5538	22400	8615
10	14000	5538	20400	7845	28800	11077	40000	15385

Note a: Table 1106.6 is based upon Rhode Island rainfall at 2.6 inches per hour.

Note b: 1 inch per foot = 0.0833mm/m; 1 sq. ft. = 0.993m²;

1 gallon per minute = 3.78 l/m.

1107.2 delete without substitution:

1108.1 add the following sentence:

1108.1 Must have the approval of the authority having jurisdiction.

Chapter 12 **Special Piping and Storage Systems**

1201.1 delete and substitute the following:

1201.1...Rhode Island Building Code.

1202.1 delete and substitute the following:

1202.1...NFPA 99.

1202.1 exceptions:

1202.1 exception 2. Rhode Island Mechanical Code.