

510-RICR-00-00-3

TITLE 510 – BUILDING CODE COMMISSION

CHAPTER 00 – N/A

SUBCHAPTER 00 – N/A

PART 3 — ~~RISBC-3~~ Rhode Island Plumbing Code

3.1 Authority

The Rhode Island Plumbing Code is promulgated by the Building Code Standards Committee pursuant to the authority granted in R.I. Gen. Laws §§ 23-27.3-100.1.5 and 23.27.3-109.1.

~~The Building Code Standards Committee, in accordance with the rule making authority of R.I. Gen. Laws §§ 23-27.3-109.1(a) through (c), has formally adopted and promulgated as the Rhode Island State Building Code, the provisions of the International Plumbing Code, 2018 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:~~

3.2 Incorporated Materials

- A. The Building Code Standards Committee hereby adopts and incorporates as the Rhode Island Plumbing Code the provisions of the International Plumbing Code (IPC), 2021 edition, as published by the International Code Council, Inc. (ICC) not including any further editions or amendments thereof and only to the extent that the provisions therein are not inconsistent with R.I. Gen. Laws Chapter 23-27.3 and any provisions reserved, deleted, or amended in this Regulation. The provisions of R.I. Gen. Laws Chapter 23-27.3 establishing administration and enforcement are hereby incorporated by reference. § 3.3 of this Part, Administration (IPC section 101) immediately follows and is supplemental to the General Laws. Editorial Note: Code users please note:

- ~~1. When purchasing or using the Plumbing 2018 Code, please take note of the particular printing edition. Errata to that printing edition is available online directly at no charge at www.iccsafe.org/cs/codes/pages/errata.aspx or call the office of the State Building Code Commissioner at 401-889-5487 for further information.~~
- ~~2. Printed copies of the administrative and enforcement provisions of R.I. Gen. Laws Chapter 23-27.3 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>.

31. The International Plumbing Code, 2018 Edition, IPC 2021 is protected by the copyright that has been issued to the ICC. IPC 2021 can be viewed and purchased here: <https://codes.iccsafe.org/codes/i-codes/2021-icodes>.

~~As a result, the State Building Code is not available in complete form to the public in an electronic format. The International Plumbing Code 2018 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.~~

2. To properly utilize the Rhode Island Plumbing Code, IPC 2021 must be read jointly with the Building Code requirements in R.I. Gen. Laws Chapter 23-27.3 and the amendments to IPC 2021 set forth in the sections of this Regulation, below.
3. Format: These code changes follow numbering sequence and topics of the IPC 2021 (first printing). All provisions of IPC 2021 are retained unless indicated as deleted or amended. Published errata are available from the ICC website.

3.3 IPC 2021 is adopted with the Following Amendments

Chapter 1: Scope and Administration

Chapter 1 is adopted with the following changes.

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

101.1 Title.

This part shall be known as the Rhode Island ~~State~~ Plumbing Code, ~~Regulation SBC-3-2019~~ hereafter referred to as "this code."

- 102.8 Add the following ~~new section 101.1.4 to the end of 102.8~~ "Referenced Codes and Standards".

~~101.1.4 Referenced Codes.~~

~~____ Rhode Island Code references added to Section 102.8: 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.~~

Formatted: RICR Paragraph 2

4. Building Code. The provisions of the Rhode Island State Building Code ~~SBC-1-2021~~ (Part 1 of this Subchapter) 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-2-2021~~ (Part 2 of this Subchapter) shall apply wherever referenced in this code as the International Residential Code.

~~Electrical. The provisions of Rhode Island State Electrical Code SBC-5-2021 (Part 5 of this Subchapter) 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.~~

~~Mechanical Code. The provisions of the Rhode Island State Mechanical Code ~~SBC-4-2021~~ (Part 4 of this Subchapter) 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.~~

~~Plumbing. The provisions of Rhode Island State Plumbing Code SBC-3-2021 (this Part) shall apply wherever referenced in this code as the International Plumbing Code, and shall apply to 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. Electrical Code/NFPA 70. The provisions of Rhode Island State Electrical Code (Part 5 of this Subchapter) shall apply wherever referenced in this code as the ICC Electrical Code.

~~Property Maintenance. The provisions of the Rhode Island State Property Maintenance Code ~~SBC-6-2021~~ (Part 6 of this Subchapter) ~~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 shall apply wherever referenced in this Code as the International Property Maintenance Code.~~~~

5. Fire Prevention Safety Code. The provisions of the Rhode Island Fire Safety Code (450-RICR-00-00-1 through 10) shall apply wherever referenced in this code as the International Fire Code. ~~Wherever and whenever provisions of the International Fire Code 2021 editions are~~

~~referenced, the appropriate Rhode Island Fire Code (450-RICR-00-00-1 through 10) requirements shall apply.~~

6. ~~Energy Code.~~ The provisions of the Rhode Island State Energy Code ~~SBC-8-2021~~ (Part 8 of this Subchapter) shall apply wherever referenced in this code as ~~the 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-1-2021~~ (Part 1 of this Subchapter) 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-2-2021~~ (Part 2 of this Subchapter) shall apply wherever referenced in this code as ~~the International Residential Code.~~

Swimming Pool and Spa Code. The Provisions of the Rhode Island Swimming Pool and Spa Code (Part 14 of this Subchapter) shall apply wherever referenced in this code as the International Swimming Pool and Spa Code.

~~9. Existing Building Code.~~ The provisions of the Rhode Island ~~State Existing Building Code SBC-1-2021~~ (Part ~~71~~ of this Subchapter) ~~in conjunction with the State Rehabilitation Code SRC-1 and the Rhode Island Fire Code (450-RICR-00-00-1 through 10) shall apply wherever referenced in this code as the or the State Rehabilitation Code (Part 20 of this Subchapter), as applicable, shall apply wherever referenced in this code as the~~ International Existing Building Code.

~~10 Swimming Pool and Spa Code.~~ The Provisions of the Rhode Island Swimming Pool and Spa Code ~~SBC-14-2021~~ (Part ~~14~~ of this Subchapter) shall apply whenever referenced in this code ~~the International Swimming Pool and Spa Code and shall apply to matters governing the design and construction of swimming pools and spas.~~

Fuel Gas Code: The provisions of the Rhode Island Fuel Gas Code (Part 19 of this Subchapter) shall apply wherever referenced in this code as the International Fuel Gas 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-1-2019 and R.I. Gen. Laws Chapter 23-27.3.~~

~~IPC 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.~~

~~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 2: Definitions

Chapter 2 is adopted with no changes.

Chapter 3: 3.4—General Regulations (IPC Section 300)

Chapter 3 is adopted with the following changes.

301.4 Add the following subsection: ~~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.

305.4.1 Delete IPC section 305.~~64~~.1 and substitute the following:

305.~~64~~.1 Sewer Depth

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

312.1 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 five (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 4: Fixtures, Faucets and Fixture Fittings

Chapter 4 is adopted with no changes.

Chapter 5: Water Heaters

Chapter 5 is adopted with no changes.

3.5—Chapter 6: Water Supply and Distribution~~(IPC Section 600)~~

Chapter 6 is adopted with the following changes:

601 Add the following ~~sections~~ subsections to section 601 General:

601.6 Water Meters:

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

601.7 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.

601.8 Public Water Supply:

Any water supply serving at least twenty-five (25) individuals at least sixty (60) days 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 (216-RICR-50-05-1).

602.3.4 Delete IPC Section 602.3.4 and substitute the following:

602.3.4 Disinfection of system

After construction or repair, the individual water supply system shall be purged of deleterious matter and disinfected in accordance with IPC Section 610.

603.2 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 ten feet (10') (3048 mm) of undisturbed or compacted earth.~~

~~Exceptions:~~

- ~~(1) The required separation distance shall not apply where the bottom of the water service pipe within ten feet (10') (3048 mm) of the sewer is a minimum of twelve inches (12") (304.85 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 ten feet (10') (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	400 ^c
Seepage pits	400
Cesspools	400
Barnyard	400
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 fifty feet (50') shall be maintained.

3.6—Chapter 7: Sanitary Drainage (IPC Section 700)

Chapter 7 is adopted with the following changes.

701.5 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 ten feet (10') (3048 mm) of the water service, the installation shall comply with the provisions of section 603.2.~~

~~Delete IPC section 703.6.~~

~~705.10.2 Delete the Exception to IPC section 705.10.2 Exception without substitution.~~

3.7 Chapter 8: Indirect/Special Waste (IPC Section 800)

Chapter 8 is adopted with the following changes.

802.1.1 Add the following exception to IPC section 802.1.1 "Food handling":

Exception:

~~Three-bay sinks served by a grease trap or receptor shall be permitted to be directly 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.~~

802.1.4 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 IPC 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 air 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 thirty inches (30") (762 mm) in developed length measured horizontally, or fifty-four inches (54") (1372 mm) in total developed length shall be trapped.~~

~~Delete just exception to section 802.2.~~

803.3 Add the following new section:

803.3 Reverse osmosis waste:

Discharge piping from reverse osmosis water shall be in accordance with the manufacturer's installation instructions.

3.8 Chapter 9: Vents (IPC Section 900)

Chapter 9 is adopted with the following changes.

903.1.1 Delete IPC section 903.1.1 and substitute the following~~Roof extension~~
insert the following:

903.1.1 Roof Extension Unprotected

Open vent pipes that extend through a roof shall be terminated not less than twelve inches (12") (304.8 mm) above the roof.

903.2 Delete IPC section 903.2 and substitute the following:

Frost Closure:

Each vent extension through a roof shall have a minimum size of three inches (3") (76.2 mm) in Providence County and two inches (2") (50.8 mm) 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 six inches (6") (152.4 mm) below the roof with an approved fitting.

3.9 Chapter 10: Traps, Interceptors and Separators (IPC Section 1000)

Chapter 10 is adopted with the following changes.

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 two inches (2") (51 mm) and not more than four inches (4") (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 four inch (4") (102 mm) 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 sections 1002.4.1 — 1002.4.4.~~

Delete IPC sections 1002.6 and substitute the following:

~~1002.6 Building Traps. Building (house traps) shall be prohibited, except where local conditions necessitate such traps. Building traps shall be provided with a clean out and a relief vent or fresh air intake on the inlet side of the trap. The size of the relief vent or fresh air intake shall not be less than one half (1/2) the diameter of the drain to which the relief vent or air intake connects. Such relief vent or fresh air intake shall be carried above grade and shall be terminated in a screened outlet located outside the building.~~

1003.1 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.

1003.2 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.

1003.3.6 Delete IPC sections ~~1003.3.6~~ without substitution. ~~and 1003.3.7.~~

1003.3.7 Delete IPC section 1003.3.7 without substitution.

3.10 Chapter 11: Storm Drainage (IPC Section 1100)

Chapter 11 is adopted with the following changes.

1108.4 Add the following new section:

1108.4 Approvals.

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

Chapter 12: Special Piping and Storage Systems

Chapter 12 is adopted with no changes.

Chapter 13: Nonpotable Water Systems

Chapter 13 is adopted with no changes.

Chapter 14: Subsurface Graywater Soil Absorption Systems

Chapter 14 is adopted with no changes.

Chapter 15: Referenced Standards

Chapter 15 is adopted with no changes.

3.4 Appendices to IPC 2021

The following appendix is adopted: Appendix E.

All other Appendices are deleted.

~~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 (Part 4 of this Subchapter) and Rhode Island Energy Conservation Code (Part 8 of this Subchapter).~~

~~Appendices E, F and G remain.~~