

510-RICR-00-00-19

TITLE 510 – BUILDING CODE COMMISSION

CHAPTER 00 – NA

SUBCHAPTER 00 – NA

PART 19 – ~~RISBC-19 State~~ Rhode Island Fuel Gas Code

19.1 Authority

The Rhode Island Fuel Gas 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) inclusive, has formally adopted and promulgated as the Rhode Island State Building Code, the provisions of the International Fuel Gas Code, 2018 edition, as published by the International Code Council, Inc. (ICC), together with amendments thereto hereinafter set forth to the articles and sections of this code:~~

19.2 Incorporated Materials

- A. The Building Code Standards Committee hereby adopts and incorporates as the Rhode Island Fuel Gas Code the provisions of the International Fuel Gas Code (IFGC), 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.
1. IFGC 2021 is protected by the copyright that has been issued to the ICC. IFGC 2021 can be viewed and purchased here: <https://codes.iccsafe.org/codes/i-codes/2021-icodes>.
 2. To properly utilize the Rhode Island Fuel Gas Code, IFGC 2021 must be read jointly with the Building Code requirements in R.I. Gen. Laws Chapter 23-27.3 and the amendments to IFGC 2021 set forth in the sections of this Regulation, below.
 3. Format: These code changes follow numbering sequence and topics of the IFGC 2021 (first printing). All provisions of IFGC 2021 are retained unless indicated as deleted or amended. Published errata is available from the ICC website.

~~The provisions of R.I. Gen. Laws Chapter 23-27.3 establishing administration and enforcement are hereby incorporated by reference. § 19.3 of this Part (Chapter 1: Administration) immediately follows and is supplemental to the General Laws. Editorial Note: Code users please note:~~

- ~~1. When purchasing or using the International Fuel Gas Code 2018, 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 401-889-5550 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 online at <http://www.rilin.state.ri.us/Statutes/TITLE23/23-27.3/INDEX.HTM>.~~
- ~~3. The International Fuel Gas Code, 2018 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 Fuel Gas 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.~~

~~B. Format: These code changes follow numbering sequence and topics of the International Fuel Gas Code 2018 (first printing). All Provisions of IFGC 2018 are retained unless indicated as deleted or revised. Published errata is available from the ICC website dependent on this printing issue number and date.~~

19.3 IFGC 2021 is Adopted with the Following Amendments

Chapter 1: Scope and Administration

~~The following Rhode Island amendments are made to the sections of Chapter 1 is adopted with the following changes.:~~

~~101.1 Delete IFGC IFG Code section 101.1-101.1 Title, and substitute the following:~~

~~101.1 Title.~~

~~These regulations shall be known as The Rhode Island State Fuel Gas Code Regulation, SBC-19-2021 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 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.~~
- ~~2. Mechanical. 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.~~
- ~~3. Plumbing. The provisions of Rhode Island State Plumbing Code, SBC-3 2021 (Part 3 of this Subchapter), 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 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.~~
- ~~5. Fire Prevention Code. The provisions of or references to the International Fire Code 2021 edition shall be cross referenced to the appropriate section of the Rhode Island Fire Safety Code (450-RIGR-00-00-1 through 10). The Chapters referencing construction standards will apply to either the Rhode Island Uniform Fire Code Standards, R.I. Gen. Laws Chapter 23-28.01, as referenced and amended NFPA 1 and NFPA 101 and those standards will apply when this code references such a section or requirement. These cross references are not intended to impose any enforcement requirements on State or 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.

6. ~~Energy Code. The provisions of the Rhode Island State Energy Conservation Code SBC-8 2021, (Part 8 of this Subchapter), shall apply wherever referenced in this code as International Energy Conservation Code, and shall apply to all matters governing the design, alteration 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.~~

9. ~~Existing Building Code. The provisions of the State Building Codes, SBC-1 2021 (Part 1 of this Subchapter), in conjunction with the State Rehabilitation Code, Part 20 of this Subchapter, and the Rhode Island Fire Safety Code 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 as International Swimming Pool and Spa Code and shall apply to matters governing the design and construction of swimming pools and spas.~~

~~Any and all such references to the various International Code Council family of code shall be substituted for the appropriate state code as indicated above.~~

101.2.4 ~~Systems and equipment outside the scope.~~

~~Delete only exception paragraph #9 in IFGC section 101.2.4 and substitute the following:~~

9. Liquefied Natural Gas (LNG) installations shall be installed in accordance with this code and the Rhode Island Fire Safety Code (450-RICR-00-00-1 through 10).

~~Delete IFG Code section 101.3 and substitute the following:~~

~~101.3 Appendices. Provisions in the appendices are permitted to be used for determining compliance to this code.~~

102.8 Add the following to the end of IFGC section 102.8 "Referenced Codes and Standards."

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

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

~~Residential Code. The provisions of the Rhode Island One and Two-Family Dwelling Code (Part 2 of this Subchapter) shall apply wherever referenced in this code as the International Residential Code.~~

~~Plumbing Code. The provisions of the Rhode Island Plumbing Code (Part 3 of this Subchapter) shall apply wherever referenced in this code as the International Plumbing Code.~~

~~Mechanical Code. The provisions of the Rhode Island Mechanical Code (Part 4 of this Subchapter) shall apply wherever referenced in this code as the International Mechanical Code.~~

~~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 (Part 6 of this Subchapter) shall apply wherever referenced in this Code as the International Property Maintenance Code.~~

~~Fire 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.~~

~~Energy Code. The provisions of the Rhode Island State Energy Code (Part 8 of this Subchapter) shall apply wherever referenced in this code as the International Energy Conservation 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.~~

~~Existing Building Code. The provisions of the Rhode Island Existing Building Code (Part 7 of this Subchapter) 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.

103 Delete all of IFGC section 103 without substitution.

104 Delete all of IFGC section 104 without substitution.

105 Delete all of IFGC section 105 without substitution.

106 Delete all of IFGC section 106 without substitution.

108 Delete all of IFGC section 108 without substitution.

109 Delete all of IFGC section 109 without substitution.

Delete IFG Code sections 103, through 106 and 108 through 109.

Formatted: RICR Paragraph 2

19.4 Chapter 2: Definitions

Chapter 2 is adopted with no changes.

Chapter 3: General Regulations

Chapter 3 is adopted with the following changes.

Section 303 Appliance Location

303.3 Add the following new exception ~~to at the end of IFGC~~ section 303.3:

- ~~7.~~ ~~(6)~~ Gas fired appliances may be installed in loft or open efficiency type apartments when there is a sleeping area not a sleeping room. The installation of appliances must comply with section 304.5 for combustion air required volume and the manufacturers' installation instructions.

Delete section 305.10 and Substitute the following:

- ~~Section 305.10 (IFGS) Repair garages: Appliances installed in repair garages shall be installed in a detached building or room, separated from repair areas by walls or partitions, floors, or floor-ceiling assemblies that are constructed so as to prohibit the transmission of vapors and having a fire-resistance rating of not less than one (1) hour, and that have no openings in the wall separating the repair area within eight feet (8') (2438 mm) of the floor. Wall penetrations shall be fire-stopped. Air for combustion purposes shall be obtained from the outdoors. The appliance room shall not be used for the storage of combustible materials.~~

Exceptions:

1. ~~Overhead heaters where installed not less than eight feet (8') (2438 mm) above the floor shall be permitted.~~
2. ~~Heating appliances for vehicle repair areas where there is no dispensing or transferring of Class I or II flammable or combustible liquids or liquefied petroleum gas shall be installed in accordance with NFPA 30A.~~

307.6 Delete IFGC section 307.6 ~~307.6 in Rhode Island without substitution.~~

310.2 Delete IFGC section 310.2 ~~310.1.1~~ and Substitute substitute the following:

310.~~21.1~~ CSST.

CSST gas piping systems shall be bonded to the electrical service grounding electrode system. The bonding jumper shall connect to a metallic pipe or fitting between the point of delivery and the first downstream CSST fitting. The bonding jumper shall be copper and not smaller than 6AWG. The bonding jumper shall not exceed forty feet (40') in length. CSST system with a conductive jacket deemed to be equivalent to a direct bonded CSST system by an approved listing agency shall only be required to be bonded in accordance with ~~section~~ Residential Code section G2411.1 (Part 2 of this Subchapter) or ~~this Fuel Gas~~ Code, section 310.1. The installation of the bonding jumper shall be by an electrician with an electrical permit and inspected by the electrical inspector.

311 ~~AddDelete sections 310.1.1.1 - 310.1.1.5: in Rhode Island new~~ section 311 entitled, "Space-Heating Systems Temperature Control"

311.~~4~~ Space-heating systems.

Interior spaces intended for human occupancy shall be provided with active or passive space-heating systems capable of maintaining a minimum indoor temperature of sixty-eight degrees Fahrenheit (68° F) (twenty degrees Celsius (20° C)) at point three feet (3') (914 mm) above floor on the design heating day. The installation of portable space heaters shall not be used to achieve compliance with this section.

Exception: Interior spaces where the primary purpose is not associated with human comfort.

19.5—Chapter 4: Gas Piping Installations

Chapter 4 is adopted with no changes.

Delete section 401.2 and substitute the following:

401.2 Liquefied Petroleum Gas & Storage.

—The storage system for liquefied petroleum gas shall be designed and installed in accordance with NFPA 58 and the following.

401.2.1

—For LNG facilities exceeding one thousand (1,000) gallons equivalent water capacity structural engineering design by a licensed Rhode Island professional engineer shall include explicit analyses of seismic, storm, and hurricane impacts including combined wind and storm surge effects on tank, facility, dock and other associated structure and underlying foundation, pilings, piers, footings or other associated supports or ground connections.

401.2.2

—Spill leak, escape and other failure analyses shall include mapping of impacts on surrounding existing structures and build able parcels to the distance determined by the engineer of record to delimit potential flame or heat impacts that could potentially impact tenability and structural stability of structures, whether adjacent to or beyond the LNG facility site. Such impacts shall be with respect to worse-case spill or release scenarios, not less than fourteen thousand (14,000) cubic meters of LNG.

401.2.3

—Site specific analyses shall be performed of potential adverse impacts within the distance determined by the engineer of record to delimit potential flame or heat impacts on tenability or stability of all facilities that house occupants of reduced independent mobility. Such occupancies include but are not limited to elderly housing, healthcare facilities, schools, and daycare facilities.

401.2.4

—The Rhode Island Building Code Board of Appeals shall review each application for such an installation where it or its associated docking facilities are located on State land, coastal land, State waters, or fill areas formerly part of State waters.

SECTION 404 (IFGC) PIPING SYSTEM INSTALLATION

404.1

—Installation of materials. All materials used shall be installed in strict accordance with the standards under which the materials are accepted and approved. In the absence of such installation procedures, the manufacturer's instructions shall be followed. Where the requirements of referenced standards or

Formatted: Indent: Left: 0", First line: 0"

Formatted: RICR Text, Indent: Left: 0"

Formatted: RICR Text

Formatted: Indent: Left: 0", First line: 0"

Formatted: RICR Text

~~manufacturer's instructions do not conform to minimum provisions of this code, the provisions of this code shall apply.~~

~~404.2 CSST~~

~~CSST piping systems shall be installed in accordance with the terms of their approval, the conditions of listing, the manufacturer's instructions and this code. The installation of the bonding jumper shall be by an electrician with an electrical permit and inspected by the electrical inspector.~~

19.6 Chapter 5: Chimneys and Vents

Chapter 5 is adopted with no changes.

Chapter 6: Specific Appliances

Chapter 6 is adopted with the following changes.

~~Delete~~ M 614.89.5 Delete IFGC section 614.9.5 and substitute the following:

M614.89.5 Length identification.

~~_____~~ The maximum length of dryer duct may exceed thirty-five feet (35') when a permanent placard, measuring a minimum five inches (5") wide, three inches (3") high, and one eighth of one inch (1/8") thick, and constructed of either wood, metal, or rigid plastic, and bearing raised or embossed lettering stating the following: "WARNING: THE EFFECTIVE LENGTH OF THIS DRYER DUCT IS xxx FEET. ANY DRYER CONNECTED TO THIS EXHAUST DUCT MUST BE RATED TO USE AN EXHAUST DUCT OF THIS LENGTH, PER THE MANUFACTURERS SPECIFICATIONS; SEVERE RISK OF FIRE MAY RESULT FOR NONCOMPLIANCE WITH THIS NOTICE."

The provisions of M~~504.9.4~~~~102.4~~ shall be used in establishing the effective length of the ductwork installed and noted on the placard. The placard shall be permanently attached to the wall or floor within six inches (6") of the terminus of the duct.

Chapter 7: Gaseous Hydrogen Systems

Chapter 7 is adopted with no changes.

Chapter 8: Reference Standards

Chapter 8 is adopted with no changes.

19.4 Appendices to IFGC 2021

The following appendices are adopted: A, B, and C.

| The following appendices are deleted: D and E.