## **ORDINANCE #**

## THE CITY OF PORTSMOUTH ORDAINS

That Chapter 15, Part I – **INTERNATIONAL PLUMBING CODE**, Part II – **INTERNATIONAL MECHANICAL CODE**, Part III – **FUEL GAS INSTALLATIONS**, and Part IV – **NATIONAL ELECTRICAL CODE** of the Ordinances of the City of Portsmouth be amended as follows (deletions from existing language **stricken**; additions to existing language **bolded**; remaining language unchanged from existing):

#### CHAPTER 15 Part I

#### INTERNATIONAL PLUMBING CODE, <u>2015</u> (Adopted 12/04/2017, effective 01/01/2018)

The City of Portsmouth adopts the State Building Code, which adopts by reference the International Plumbing Code, 20<u>1509</u> Edition (IPC) as published by the International Code Council, Inc. is hereby adopted as **Chapter 15, Part I**, of the Ordinances of the City of Portsmouth, New Hampshire subject to the following amendments, additions and deletions.

### **SECTION 101 GENERAL**

**101.5** Appendices. Provisions in the appendices shall not apply unless specifically adopted. Appendices B, C, D, and E and F are adopted.

## SECTION 103 DEPARTMENT OF **<u>PLUMBING INSPECTION</u>BUILDING SAFETY**

## **SECTION 106 PERMITS**

Change subsection to read as follows:

**106.3** <u>Application for Plumbing</u> permits. Plumbing permits shall be issued on the form provided by the Building Inspection Department. A separate permit application is not required.

Change subsection to read as follows:

**106.6.2 Fee schedule.** Fees shall be determined by the adoption of fees by budget resolution of the City Council in accordance with Chapter 1, Article XVI of the Ordinances of the City of Portsmouth, NH. All permit fees shall be payable at the time the permit is issued. No work will be inspected unless all fees are paid in full. See Section 107.2.5.41.2.4-for reinspection fees.

### SECTION 107 INSPECTIONS AND TESTING

Add new subsection to read as follows:

**107.2.5.4 Reinspection fees.** If, upon being called for any inspection, and the work is not in compliance with this Code, verbal <u>and written notice (including the specific code sections) will</u> <u>be provided clearly identifying the deficiencies.</u> <u>notice will be given as to the deficiencies and</u> <u>such deficiencies shall be noted on the code official's report.</u> The permit holder shall be

responsible for correcting the item(s) and for notifying the code official to reinspect said deficiencies. If when called to reinspect these deficiencies, all is correct, no further action will be taken. However, if during the first reinspection, the work in question has not been corrected, there will be a reinspection fee assessed as determined by the adoption of fees by budget resolution of the City Council, in accordance with Chapter 1, Article XVI which must be paid at the Inspection Office before a third inspection will be made. For each subsequent reinspection of the same deficiency or deficiencies, a like procedure and fee shall be assessed.

During any inspection, the code official may find new item(s), not previously discovered, to be nonconforming. These item(s) will be noted on the code official's report, and will require reinspections. Reinspection fees will not be assessed for items newly found or for their first reinspection. However, said fees shall be assessed for these items if a third inspection is required. The same procedures as outlined above shall govern. Failure to pay any reinspection fees shall be just cause to revoke the permit under which the work was being done. Furthermore, no future permits will be issued to any person who owes the City of Portsmouth said reinspection fees, until all outstanding fees are paid.

## **SECTION 108 VIOLATIONS**

Change subsection to read as follows:

**108.4 Violation penalties.** Any person who shall violate a provision of this Code or shall fail to comply with any of the requirements thereof or who shall erect, construct, alter or repair <u>plumbing</u> <u>work and aa</u> building or structure in violation of an approved plan or directive of the building official, or of a permit or certificate issued under the provisions of this Code, shall be subject to the penalty provisions prescribed by RSA 155-A:8. Each day that the violation continues shall be deemed a separate offense. Reference State RSA's 155-A:8, 625:8 I(c), 651:2 IV(a) and 676:17 for further penalty provisions.

## **SECTION 202 GENERAL DEFINITIONS**

### **Change the following definitions to read as follows:**

**Hot Water:** Water having a temperature range between 111 degrees F (43.9 degrees C) and 130 degrees F (54 degrees C).

**Tempered Water:** Water having a temperature range between 85 degrees F (29 degrees C) and 110 degrees F (43.3 degrees C).

Amend Section 202 by adding the following definition:

### SECTION 305 PROTECTION OF PIPES AND PLUMBING SYSTEM COMPONENTS

Change subsection to read as follows:

**305.46** Freezing. Water, soil and waste pipes shall not be installed outside of a building, in attics or crawl spaces, concealed in outside walls, or in any other place subject to freezing temperature unless adequate provisions are made to protect such pipes from freezing by insulation or heat or both. The Portsmouth Water/Sewer Ordinance requires building water service pipes to be 4 feet

below grade, or adequately insulated to afford the same protection whenever a condition arises that the 4 feet cannot be attained.

### Change subsection to read as follows:

**305.46.1 Sewer depth.** Building sewers that connect to private sewage disposal systems shall conform to RSA 485-A relative to minimum depth below finish grade. Building drains that connect to public sewers shall be a minimum depth of 48 inches(1219 mm) below grade or be adequately insulated to afford the same protection whenever a condition arises that the 48 inches(1219 mm) cannot be attained.

## SECTION 312 TESTS AND INSPECTIONS

## Change subsection to read as follows:

**312.1 Required tests.** The permit holder shall make the applicable tests prescribed in Sections  $312.2, \frac{312.3}{312.3}$ , through 312.9 to determine compliance with the provisions of this code. The permit holder shall give reasonable advance notice (2 work days) 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.

## Change first sentence to read as follows:

<u>312.3 Drainage and vent air test.</u> Plastic piping shall not be tested using air unless a fixed 5 psi (34.5 kPA) relief valve is installed for testing purposes only.

## SECTION 403 MINIMUM PLUMBING FACILITIES

### **Change exception 2 in subsection to read as follows:**

### 403.2 Separate facilities.

**Exception 2: In other than mercantile occupancies, separate facilities shall not be required in structures or tenant spaces with a total occupant load, including both employees and customers, of 24 or less. See Section 403.4.4 of these amendments for mercantile occupancy fixture requirements.** 

### Add new subsection to read as follows:

403.34.5 Group M occupancies. A minimum of one public single occupant toilet room shall be provided in buildings or tenant spaces when the total occupant load is more than 24 persons but less than 50 persons. A minimum of two public single occupant toilet rooms shall be provided in buildings or tenant spaces when the total occupant load is 50 persons or more. Additional plumbing fixtures shall be provided when the occupant load reaches a point where the provisions of Table 403.1 would require more than two fixtures.

**Exception:** Where an existing toilet room is present and renovations are being undertaken, the existing toilet room shall not be removed even if the occupant load is 24 persons or less.

In a case where there are more toilet rooms existing than what are required under this code, toilet rooms in excess of the minimum required may be removed but at least one shall remaAdd new inexception; in subsection to read as follows:

## 403.3 Required public toilet facilities.

Exception 3: Mercantile occupancies having a public access area less than or equal to 500 square feet.

## SECTION 405 INSTALLATION OF FIXTURES

Add new subsections to read as follows:

**405.3.63** Bathtubs and showers. The clear space in front of a bathtub or shower shall be a minimum of 30-inches wide and 24-inches deep.

**405.3.74** Ceiling height above fixtures. Bathrooms and kitchens sink areas shall have a minimum ceiling height of 6 feet 8 inches (6'-8") at the front clearance areas for fixtures as shown in Figure 405.3.1. The ceiling height above fixtures shall be such that the fixture is capable of being used for its intended purpose. A shower or bathtub equipped with a showerhead shall have a minimum ceiling height of 6 feet 8 inches (6'-8") above a minimum area 30 inches by 30 inches at the showerhead.

## (SECTION 410 DRINKING FOUNTAINS)

## SECTION 501 GENERAL

### **Change subsections to read as follows:**

501.2 Water heater as space heater. Where combination potable water heating and space heating systems require water for space heating, a master thermostatic mixing valve complying with ASSE 1017 shall be provided to limit the water supplied to the potable hot water distribution system to a temperature of 130 degrees F (54 degrees C) maximum. The potability of the water shall be maintained throughout the system.

501.6 Water temperature control in piping from tankless heaters. The temperature of water from tankless heaters shall be a maximum of 130 degrees F (54 degrees C) when intended for domestic uses. When a tempering device is used to limit the maximum water distribution system temperature it shall conform to ASSE 1017. This provision shall not supersede the requirement for protective shower valves in accordance with Section 424.3.

### SECTION 605 MATERIALS, JOINTS AND CONNECTIONS

### **Edit subsection as follows:**

605.22.2 Solvent cementing. *Delete* the word "purple" in the second sentence.

## SECTION 607 HOT WATER SUPPLY SYSTEMS

Add new subsection to read as follows:

**607.1.31** Child care and Group E water temperatures. Water for hand washing sinks in child care and Group E occupancies shall be between 100 degrees F (37 degrees C) and 120 degrees F (49 degrees C).

#### **Change subsection to read as follows:**

607.2 Hot water supply temperature maintenance. Where the developed length of hot water piping from the source of hot water supply to the farthest fixture exceeds 50 feet (15.24 m), the hot water supply system shall be provided with a method of maintaining the temperature in accordance with the International Energy Code.

## SECTION 608 PROTECTION OF POTABLE WATER SUPPLY

Change subsection to read as follows:

**608.14 Portsmouth Water Department backflow prevention criteria.** Backflow prevention at the water meter shall be accordance with Section 608.14.1 through 608.14.1. **<u>1.6</u>**, and Section 608.16.5.

## SECTION 701 SANITARY DRAINAGEGENERAL

## **SECTION 705 JOINTS**

Edit subsections as follows:

705.<u>11</u>8.2 Solvent cementing. *Delete* the word "purple" in the second sentence.

705.14.2 Solvent cementing. *Delete* the word "purple" in the second sentence.

## SECTION 9<u>12</u>09 WET VENTING

Amend Table 9<u>1209</u>.3 as follows:

**Table 9<u>12</u>09.3 Wet Vent Sizing.** <u>*Delete*</u> 1-1/2 inch Wet Vent Pipe Size and 1 Drainage Fixture Unit Load from table.

## SECTION 9187 AIR ADMITTANCE VALVES

Change subsection to read as follows:

**9187.3 Where permitted.** Air admittance valves are not a substitute for a conventional venting system. Air admittance valves shall only be used when structural conditions prevent conventional venting of fixtures. Use of air admittance valves shall be pre-approved by the code official on a case-by-case basis. When approved, individual branch and circuit vents shall be permitted to terminate with a connection to an individual or branch type air admittance valves. Stack vents and vent stacks shall be permitted to terminate to stack type air admittance valves. Individual and branch type air admittance valves shall vent only fixtures that are on the same floor level and connect to a horizontal branch drain. The horizontal branch drain having individual and branch type air admittance valves shall conform to Section 9187.3.1 or 917.3.2. Stack type air admittance valves shall conform to Section 9187.3.1

## SECTION 1003 INTERCEPTORS AND SEPARATORS

Change subsection to read as follows:

**1003.3 Food service grease interceptors required**. New and remodeled food service establishments shall install a 1000 gallon in-ground grease interceptor located outside the building envelope in addition to all required grease interceptors at fixtures inside the building. The grease interceptor shall receive drainage from fixtures and equipment with grease laden waste as stated in Section 1003.3.1.

**Exception 3:** If the drain line connecting a grease laden fixture(s) to the in-ground interceptor exceeds 50 liner feet, then said fixture or fixtures, shall also be protected with a grease removal device or an AGRU as listed in Section 1003.3.4 or 1003.3.5.

## CHAPTER 15 REFERENCED STANDARDS

Insert the following referenced codes and regulations:

New Hampshire State Building Code Department of Safety 33 Hazen Drive Drive Concord, NH 03305 (603) 271-**32947965** bldgcodebrd@dos.nh.gov New Hampshire Architectural Barrier Free Design Code Governor's Commission on Disability 21 South Fruit Street, Suite 101 Concord, NH 03301-8518 (603) 271-2773 1-800-852-3405 (NH) http://www.nh.gov/disability/abcommittee.html **New Hampshire Energy Code** Public Utilities Commission 21 South Fruit Street, Suite 10 Concord, NH 03301-2429 (603) 271-2431 www.puc.state.nh.us/EnergyCodes/energypg.htm puc@puc.nh.gov Add in the NFPA section the following referenced Standards: 54-1509 National Fuel Gas Code 101.2, 102.8.2 Amend in the NFPA section the following referenced Standards: Change 70-1402 to 70-1708 National Electric Code 102.8.1, 502.1, 504.3, 1113.1.3

## **APPENDIX A – PLUMBING PERMIT FEE SCHEDULE**

Appendix A is <u>not</u> adopted as part of this ordinance.

**APPENDIX B – RATES OF RAINFALL FOR VARIOUS CITIES** *Appendix B is adopted as part of this ordinance without amendment* 

<u>APPENDIX C – STRUCTURAL SAFETY</u> Appendix C is adopted as part of this ordinance without amendments<del>s.</del>

**APPENDIX C – GRAY WATER RECYCLING SYSTEMS** Appendix C is adopted as part of this ordinance without amendments.

**APPENDIX D – DEGREE DAY DESIGN TEMPERATURES** Appendix D is adopted as part of this ordinance without amendments.

## APPENDIX E – SIZING OF WATER PIPING SYSTEM

Appendix E is adopted as part of this ordinance without amendments.

## APPENDIX F – STRUCTURAL SAFETY

Appendix F is adopted as part of this ordinance without amendments

**APPENDIX G – VACUUM DRAINAGE SYSTEM** *Appendix G is <u>not</u> adopted as part of this ordinance.* 

### CHAPTER 15 Part II

#### INTERNATIONAL MECHANICAL CODE, 20<u>15</u>09 (Adopted 12/04/2017, effective 01/01/2018)

The City of Portsmouth adopts the State Building Code, which adopts by reference The International Mechanical Code, 20<u>15</u>09 Edition (IMC) as published by International Code Council is hereby adopted as **Chapter 15, Part II**, of the Ordinances of the City of Portsmouth, New Hampshire, subject to the following amendments, additions and deletions.

## SECTION 102 APPLICABILITY

Add new subsections to read as follows:

**102.8.31 Electrical code.** The provisions of the *National Electric Code*, NFPA 70 shall apply to the installation of electrical systems including alterations, repairs, replacement, equipment, appliances, fixtures, fittings and appurtenances thereto. Where ever this Code references the *International Electric Code* the reader shall substitute that reference with the *National Electric Code*, NFPA 70 as adopted by the State of New Hampshire. Article 80, *Administration and Enforcement, of NFPA 70* is not adopted by the City of Portsmouth. Refer to Chapter 12 of the city ordinances (Building Code) for the electric code administration process.

**102.8.42** Gas code. The provisions of the *National Fuel Gas Code*, NFPA 54, shall apply to the installation of gas piping from the point of delivery (meter) to gas appliances and related accessories as covered in this code. Wherever this Code references the *International Fuel Gas Code* the reader shall substitute that reference with the *National Fuel Gas Code*, NFPA 54.

**102.8.53** Liquefied petroleum gas code. The provisions of the *Liquefied Petroleum (LP) Gas Code*, NFPA 58, shall apply to the installation of propane containers and the first- and second stage pressure regulators.

**102.8.64 Commercial cooking.** The requirements of NFPA 96, the Standard for Ventilation Control and Fire Protection of Commercial Cooking Operations, Chapter 10: Fire-Extinguishing Systems, Chapter 11: Procedures for the Use and Maintenance of Equipment and Chapter 14: Solid Fuel Cooking Operations shall apply to Type I hoods, in occupancies with commercial food preparation services.

## **SECTION 106 PERMITS**

Change subsection to read as follows:

**106.5.2 Fee schedule.** Fees shall be determined by the adoption of fees by budget resolution of the City Council in accordance with Chapter 1, Article XVI, of the Ordinances of the City of Portsmouth, NH. All permit fees shall be payable at the time the permit is issued. No work will be inspected unless all fees are paid in full. See Section 107.<u>3.46</u> for reinspection fees.

### SECTION 107 INSPECTIONS AND TESTING

Add new subsection to read as follows:

**107.3.4 Reinspection fees:** If, upon being called for any inspection, and the work is not in compliance with this Code, **verbal** and written notice (including the specific code section) will be provided clearly identifying the deficiencies. notice will be given as to the deficiencies and such deficiencies shall be noted on the code official's report. The permit holder shall be responsible for correcting the item(s) and for notifying the code official to reinspect said deficiencies. If when called to reinspect these deficiencies, all is correct, no further action will be taken. However, if during the first reinspection, the work in question has not been corrected, there will be a reinspection fee assessed by the adoption of fees by budget resolution of the City Council in accordance with Chapter 1, Article XVI, which must be paid at the Inspection Office before a third inspection will be made. For each subsequent reinspection of the same deficiency or deficiencies, a like procedure and fee shall be assessed.

During any inspection, the code official may find new item(s), not previously discovered, to be nonconforming. These item(s) will be noted on the code official's report, and will require reinspections. Reinspection fees will not be assessed for items newly found or for their first reinspection. However, said fees shall be assessed for these items if a third inspection is required. The same procedures as outlined above shall govern. Failure to pay any reinspection fees shall be just cause to revoke the permit under which the work was being done. Furthermore, no future permits will be issued to any person who owes the City of Portsmouth said reinspection fees, until all outstanding fees are paid.

## SECTION 108.0 VIOLATIONS

Change subsection to read as follows:

**108.4 Violation penalties.** Any person who shall violate a provision of this Code or shall fail to comply with any of the requirements thereof or who shall erect, construct, alter or repair **mechanical equipment or mechanical work anda** building or structure in violation of an approved plan or directive of the building official, or of a permit or certificate issued under the provisions of this Code, shall be subject to the penalty provisions prescribed by RSA 155-A:8. Each day that the violation continues shall be deemed a separate offense. Reference State RSA's 155-A:8, 625:8 I(c), 651:2 IV(a) and 676:17 for further penalty provisions.

## SECTION 501 EXHAUST SYSTEM-GENERAL

Add new subsection to read as follows:

**501.65** Mechanical equipment and terminations in the Historic District. Mechanical equipment and equipment terminations shall comply with the *City of Portsmouth Zoning Ordinance* with respect to the allowable size of equipment and termination devices, without having to receive Historic District Commission approval.

#### **SECTION 507 COMMERCIAL KITCHEN HOODS**

#### Add new subsection to read as follows:

507.2.3.1 Cooking appliances for accessory uses. All free standing domestic ranges used for cooking demonstrations/classes, employee break rooms, or similar "mini" kitchens, shall have Type II range hoods complying with Sections 507.5 and 507.7.2. Range hood vent terminations shall comply with Section 506.4.1. Ranges used for such accessory purposes shall not be used to prepare food sold to the general public.

#### SECTION 509 FIRE SUPPRESSION SYSTEMS

### **CHAPTER 8 CHIMNEYS AND VENTS**

## SECTION 801 <u>CHIMNEYS AND VENTSGENERAL</u> CHAPTER 15 REFERENCED STANDARDS

Insert the following Codes and Regulations:

New Hampshire State Building Code Department of Safety 33 Hazen Drive Concord, NH 03305 (603) 271-<del>32947965 bldgcodebrd@dos.nh.gov</del>

#### Guidelines Manual for Two (2) PSIG Gas Systems.

1601.2 (NFPA 54, 5.5.1)

Unitil Corporation. PO Box 508 325 West Road, Portsmouth, NH 03802-0508, 1-800-552-3047

#### **New Hampshire Energy Code**

Public Utilities Commission 21 South Fruit Street, Suite 10 Concord, NH 03301-2429 (603) 271-2431 <u>www.puc.state.nh.us/EnergyCodes/energypg.htm</u> <u>puc@puc.nh.gov</u>

Add in the NFPA section the following referenced Standards:

70-<u>17</u>05-National Electric Code

102.8.<mark>1</mark>

APPENDIX A – COMBUSTION AIR OPENINGS AND CHIMNEY CONNECTOR PASS-THROUGH Appendix A is adopted as part of this ordinance.

<u>APPENDIX B – RECOMMENDED PERMIT FEE SCHEDULE</u> <u>Appendix B is not adopted as part of this ordinance.</u>

## <u>CHAPTER 15</u> <u>Part III</u> <del>CHAPTER 15</del> <del>PART III</del> <del>FUEL GAS INSTALLATIONS</del>NATIONAL FUEL GAS CODE

#### SECTION 1001 GENERAL

This chapter shall govern the installation, modification and maintenance of fuel gas piping systems, fuel gas utilization equipment and related accessories. All such installations shall be regulated by the *National Fuel Gas Code*, NFPA 54 (2015) subject to the following additions, amendments and deletions.

**1001.2** Amendments to the National Fuel Gas Code. The following text refers to the *National Fuel Gas Code*, NFPA 54 listed in Chapter 15.

#### Section 5.5 Piping System Operating Pressure Limitations.

Add new subsection to read as follows:

**5.5.1.1** Two pound gas systems. Two pound gas delivery systems shall be designed and installed as outlined in the *Guidelines Manual for 2 psig Gas Systems* listed in Chapter 15.

(Section 5.6 Acceptable Piping Materials and Joining Methods.)

Delete the following subsections without substitution:

5.6.2.3 Copper and Brass 5.6.2.4 Threaded Copper, Brass, and Aluminum 5.6.2.5 Aluminum Alloy 5.6.2.6 Aluminum Installation 5.6.3 Metallic Tubing 5.6.3.1 Steel 5.6.3.2 Copper and <u>Copper Alloy</u>Brass 5.6.3.3 Aluminum

**Change subsection to read as follows:** 

5.6.3.4 Corrugated Stainless Steel. Corrugated Stainless Steel Tubing must be installed in accordance with the manufacturers' installation instructions for specific construction types. A third party inspection may be required pursuant to Chapter 17, Section 1704 of the International Building Code.

### Section 7.2 Installation of Piping.

Add new subsections to read as follows:

**7.2.<u>6</u>8.1 Exterior Meter Connections.** CSST shall not be connected to an exterior meter. The tubing shall terminate at the foundation wall with a termination fitting, and the gas meter shall be rigidly connected with steel piping to the building structure.

**7.2.<u>6</u>8.2 Fireplace Log Installations.** CSST shall terminate with a termination fitting at the entrance to the masonry fire box. The workmanship shall be performed and completed in such a manner so that the termination will not be exposed to any mechanical damage.

**7.2.<u>68.3</u> Fixed Appliance Connection Using CSST.** CSST may be directly connected to a fixed appliance when all the following conditions are met:

- 1. The tubing is securely attached to the building structure or other means of solid support.
- 2. Tubing shall not run exposed for a distance greater than or equal to 30 inches without being physically attached to the building structure or other means of solid support.
- 3. CSST terminates with a proper fitting and gas cock.

7.2.<u>6</u>8.4 CSST Used as an Appliance Connection. CSST shall not be used as a flexible appliance connector downstream of the appliance shutoff device.

**7.2.8.5** <u>7.2.6.5</u> Testing Requirements for CSST Systems. When CSST piping systems are installed in new construction or remodeling, the system shall be tested before any piping is covered as part of the inspections prescribed in Chapter 8.1. Before placing appliances and equipment in operation a second pressure test as prescribed in Chapter 8.1 shall be completed and inspected.

**7.2.<u>6</u>8.6 CSST Piping Installed on Roofs.** CSST shall be installed for roof top equipment only when it is supported by one of the following methods:

- 1. The CSST tubing is installed within a metal or plastic conduit that is securely attached by an appropriate method every six feet to the roof structure. Where the piping system requires a tee to be installed within the line, the sleeve shall terminate no more than 12 inches from the tee on both main and branch line runs.
- 2. For CSST tubing having sizes of 1<sup>1</sup>/<sub>2</sub> inch and two inches and having a UV stabilized jacket, all the following requirements shall be satisfied:
  - a. The CSST shall be supported on blocks which are spaced not more than 48 inches apart.
  - b. The blocks shall be constructed of materials appropriate for outdoor conditions and shall be securely attached by an appropriate method to the roof structure, and
  - c. The method used to attach the CSST to the block shall not damage the plastic coating.
- 3. The maximum length of tubing not supported by any method listed shall not exceed 30inches when connected to a gas fired roof top unit or similar gas equipment.

Section 12.5 Type of Venting Systems to Be Used

Change subsection to read as follows:

<u>12.5.3 Plastic Pipes and Joints. Plastic pipe and fittings used to vent appliances shall</u> <u>be listed for use as a gas vent by the piping manufacturer and shall be installed in</u> <u>accordance with the appliance manufacturer's installation instructions. Where primer is</u> <u>required, it shall be of contrasting color</u>.

3.\_\_\_\_

## Section 12.9 Through the wall vent termination.

Add new subsection to read as follows:

**12.9.76** Through-the-wall vents for mechanical draft vented appliances shall terminate a minimum of 5 ft from property lines.

End of NFPA 54 Amendments.

APPENDIX A COMBUSTION AIR OPENINGS AND CHIMNEY CONNECTOR PASS-THROUGH Appendix A is adopted as part of this ordinance.

**APPENDIX B – RECOMMENDED PERMIT FEE SCHEDULE** Appendix B is <u>not</u> adopted as part of this ordinance.

## CHAPTER 15 PART IV

## NATIONAL ELECTRICAL CODE, 2017

The City of Portsmouth adopts the State Building Code, which adopts by reference The National Electrical Code, 2017(NEC), as Chapter 15, Part IV, of the ordinances of the City of Portsmouth, New Hampshire, subject to the following amendments, additions and deletions:

Change subsection to read:

210.8 Ground-Fault Circuit-Interrupter Protection for Personnel.

<u>Ground-fault circuit-interrupter protection for personnel shall be provided as</u> required in

**210.8(A) through (E). The ground- fault circuit interrupter shall be installed in a readily** 

accessible location.

For the purposes of this section, when determining distance from receptacles the distance shall

be measured as the shortest path the cord of an appliance connected to the receptacle would

follow without piercing a floor, wall, ceiling, or fixed barrier, or passing through a door,

doorway, or window.

(A) Dwelling Units. All 125-volt, and 240 volts single-phase, 15-thru 50 ampere receptacles installed in the locations specified in 210.8(A)(1) through (10) shall have ground-fault circuit interrupter protection for personnel.

## 1) Bathrooms

(2) Garages, and also accessory buildings that have a floor located at or below grade level not

intended as habitable rooms and limited to storage areas, work areas, and areas of similar use.

### (3) Outdoors

Exception to (3): Receptacles that are not readily accessible and are supplied by a branch circuit dedicated to electric snow-melting, deicing, or pipeline and vessel heating equipment

shall be permitted to be installed in accordance with 426.28 or 427.22, as applicable.

(4) Crawl spaces — at or below grade level.

(5) Unfinished portions or areas of the basement not intended as habitable rooms.

*Exception to* (5): A receptacle supplying only a permanently installed fire alarm or burglar

alarm system shall not be required to have ground fault circuit-interrupter protection.

**Informational Note: See 760.41(B) and 760.121(B) for power supply requirements for fire alarm systems.** 

**Receptacles installed under the exception to 210.8**(A)(5) shall not be considered as meeting the requirements of 210.52(G).

(6) Kitchens — where the receptacles are installed to serve the countertop surfaces.

(7) Sinks — where receptacles are installed within 1.8 m (6 ft) from the top inside edge of the

bowl of the sink.

(8) Boathouses

(9) Bathtubs or shower stalls — where receptacles are installed within 1.8 m (6 ft) of the outside edge of the bathtub or shower stall.

(10) Laundry areas

**B)** All Area Including Dwelling Unit. All single-phase receptacles rated 150 volts to ground or less, 50 amperes or less and three phase receptacles rated 150 volts to ground or less, 100 amperes or less installed in the following locations shall have ground-fault circuit-interrupter protection for personnel.

#### (1) Bathrooms

(2) Kitchens

(3) Rooftops

Exception: Receptacles on rooftops shall not be required to be readily accessible other than from

the rooftop.

(4) Outdoors

Exception No. 1 to (3) and (4): Receptacles that are not readily accessible and are supplied by a

branch circuit dedicated to electric snow melting, deicing, or pipeline and vessel heating equipment shall be permitted to be installed in accordance with 426.28 or 427.22, as applicable.

Exception No. 2 to (4): In industrial establishments only, where the conditions of maintenance

and supervision ensure that only qualified personnel are involved, an assured equipment grounding conductor program as specified in 590.6(B)(3) shall be permitted for only those

receptacle outlets used to supply equipment that would create a greater hazard if power is

interrupted or having a design that is not compatible with GFCI protection.

(5) Sinks — where receptacles are installed within 1.8 m (6 ft) from the top inside edge of the bowl of the sink.

*Exception No. 1 to (5): In industrial laboratories, receptacles used to supply equipment where removal of power would introduce a greater hazard shall be permitted to be installed without GFCI protection.* 

**Exception** No. 2 to (5): For receptacles located in patient bed locations of general care (Category 2) or critical care (Category 1) spaces of health care facilities other than those covered under 210.8(B)(1), GFCI protection shall not be required.

(6) Indoor wet locations.

(7) Locker rooms with associated showering facilities.

(8) Garages, service bays, and similar areas other than vehicle exhibition halls and showrooms.

(9) Crawl spaces — at or below grade level.

(10) Unfinished portions or areas of the basement not intended as habitable rooms.

(C) Boat Hoists. GFCI protection shall be provided for outlets not exceeding 240 volts that supply boat hoists installed in dwelling unit locations.

(D) Kitchen Dishwasher Branch Circuit. GFCI protection shall be provided for outlets that supply dishwashers installed in dwelling unit locations.

Add new subsection to read as follows:

(E) Kitchen Microwaves, Range Hood Branch Circuits. GFCI protection shall be provided for outlets, or hard wired microwaves and range hood in dwelling unit locations.

**(F) Kitchen Refrigerator Branch Circuits.** GFCI protection shall be provided for outlets that supply refrigerators installed in dwelling unit location.

(G) Kitchen Garbage Disposal, and Trash Compactors Branch Circuits. GFCI protection shall be provided for outlets that supply garbage disposals and trash compactors installed in dwelling units.

**(H) Kitchen Electric Ranges Branch Circuits.** GFCI protection shall be provided for all electric ranges 120 volts thru 240 volts 50 amps and less in dwelling units.

(I) Electric Dryers in Bathrooms, Basements and Laundry Room Rooms. GFCI protection shall be provided for circuits for 120 volt thru 240 volts 50 amps or less that supply electric dryers in dwelling units.

(J) Crawl Space Lighting Outlets. GFCI protection shall be provided for lighting outlets not exceeding 120 volts installed in crawl space.

Change subsection to read as follows:

**<u>230 Service,</u>** Part VI. Service Equipment — Disconnecting Means.

# 230.70 General. Means shall be provided to disconnect all conductors in a building or other structure from the service entrance conductors.

(A) Location. The service disconnecting means shall be installed in accordance with 230.70(A)(1), (A)(2), and (A)(3) except for one and two family dwellings, the disconnecting means shall be located on the outside of the dwelling in a readily accessible location nearest point of the conductors entering the building or structure.

(1) Readily Accessible Location. The service disconnecting means shall be installed at a readily accessible location either outside of a building or structure or inside nearest the point of entrance of the service conductors.

(2) Bathrooms. Service disconnecting means shall not be installed in bathrooms.

(3) Remote Control. Where a remote control device(s) is used to actuate the service disconnecting means, the service disconnecting means shall be located in accordance with 230.70(A)(1).

(B) Marking. Each service disconnect shall be permanently marked to identify it as a service disconnect.

(C) (C) Suitable for Use. Each service disconnecting means shall be suitable for the prevailing conditions. Service equipment installed in hazardous (classified) locations shall comply with the requirements of Articles 500 through 501

Change subsection to read as follows:

## Article 334, Part II. Installation

**<u>334.10 Uses Permitted.</u>** Type NM, Type NMC, and Type NMS cables shall be permitted to be used in the following, except as prohibited in 334.12:

(1) One- and two-family dwellings and their attached or detached garages, and their storage buildings.

(A) Type NM. Type NM cable shall be permitted as follows:

(1) For both exposed and concealed work in normally dry locations in one and two family dwelling.

(2) To be installed or fished in air voids in masonry block or tile walls.

334.12 Uses Not Permitted.

(A) Types NM, NMC, and NMS. Types NM, NMC, and NMS cables shall not be permitted as follows:

(1) In any dwelling or structure not specifically permitted in 334.10(1)

- (2) Exposed in a dropped or suspended ceiling in other than one- and two-family.
- (3) As service-entrance cable.

Change subsection to read as follows:

## 334.15 Exposed Work in one and two family dwelling.

In exposed work, except as provided in 300.11(A), cable shall be installed as specified in 334.15(A) through (C).

(A) To Follow Surface. Cable shall closely follow the surface of the building finish or of running boards.

(B) Protection from Physical Damage. Cable shall be protected from physical damage where necessary by rigid metal conduit, intermediate metal conduit, electrical metallic tubing, Schedule 80 PVC conduit, Type RTRC marked with the suffix - XW, or other approved means. Where passing through a floor, the cable shall be enclosed in rigid m conduit, Type RTRC marked with the suffix -XW, or other approved means at least 150 mm (6 in.) above the floor.

Type NMC cable installed in shallow chases or grooves in masonry, concrete, or adobe shall be protected in accordance with the requirements in 300.4(F) and covered with plaster, adobe, or similar finish.

(C) In Unfinished Basements and Crawl Spaces in one and two family dwellings. Where cable is run at angles with joists in unfinished basements and crawl spaces, it

shall be permissible to secure cables not smaller than two 6 AWG or three 8 AWG conductors directly to the lower edges of the joists. Smaller cables shall be run either through bored holes in joists or on running boards. Nonmetallic sheathed cable installed on the wall of an unfinished basement shall be permitted to be installed in a listed conduit or tubing or shall be protected in accordance with 300.4. Conduit or tubing shall be provided with a suitable insulating bushing or adapter at the point the cable enters the raceway. The sheath of the nonmetallic-sheathed cable shall extend through the conduit or tubing and into the outlet or device box not less than 6 mm (1/4 in.). The cable shall be secured within 300 mm12 in.) of the point where the cable enters the conduit or tubing. Metal with the provisions of 250.86 and 250.148.

334.17 Through or Parallel to Framing Members. Types NM, NMC, or NMS cable shall be protected in accordance with 300.4 where installed through or parallel to framing members. Grommets used as required in 300.4(B) (1) shall remain in place and be listed for the purpose of cable protection.

Change subsection to read as follows:

**334.23 In Accessible Attics in one and two family dwellings.** The installation of cable in accessible attics or roof spaces shall also comply with 320.23.

Change subsection to read as follows:

Article 338. Service Entrance Cable: Type SE and USE, Part II. Installation

338.10 Uses Permitted.

(A) Service-Entrance Conductors for one and two family dwellings. Service-entrance cable shall be permitted to be used as service-entrance conductors and shall be installed in accordance with 230.6, 230.7, and Parts II, III, and IV of Article 230.

(B) Branch Circuits or Feeders.

(1) Grounded Conductor Insulated. Type SE service-entrance cables shall be permitted in wiring systems where all of the circuit conductors of the cable are of the thermoset or thermoplastic type.

(2) Use of Uninsulated Conductor. Type SE service-entrance cable shall be permitted for use where the insulated conductors are used for circuit wiring and the uninsulated conductor is used only for equipment grounding purposes.

(3) Temperature Limitations. Type SE service-entrance cable used to supply appliances shall not be subject to conductor temperatures in excess of the temperature specified for the type of insulation involved.

(4) Installation Methods for Branch Circuits and Feeders.

(a) Interior Installations. In addition to the provisions of this article, Type SE service-entrance cable used for interior wiring shall comply with the installation requirements of Part II of Article 334, excluding 334.80.

For Type SE cable with ungrounded conductor sizes 10 AWG and smaller, where installed in thermal insulation, the ampacity shall be in accordance with 60°C (140°F) conductor temperature rating. The maximum conductor temperature rating shall be permitted to be used for ampacity adjustment and correction purposes, if the final derated ampacity does not exceed that for a 60°C (140°F) rated conductor.

Change subsection to read as follows:

338.12 Uses Not Permitted.

(A) Service-Entrance Cable. Service-entrance cable (SE) shall not be used under the following conditions or in the following locations, other than one and two family dwellings.

(1) Where subject to physical damage unless protected in accordance with 230.50(B).

(2) Underground with or without a raceway.

(3) For exterior branch circuits and feeder wiring unless the installation complies with the provisions of Part I of Article 225 and is supported in accordance with 334.30 or is used as messenger-supported wiring as permitted in Part II of Article 396.

The City Clerk shall properly alphabetize and/or re-number the ordinances as necessary in accordance with this amendment.

All ordinances or parts of ordinances inconsistent herewith are hereby deleted.

This ordinance shall take effect upon its passage.

APPROVED:

Jack Blalock, Mayor

ADOPTED BY COUNCIL:

Kelli L. Barnaby, City Clerk