~~CHAPTER 15~~
~~Part I~~

~~INTERNATIONAL PLUMBING CODE, 2015~~
~~(Adopted 12/02/2019)~~

~~The City of Portsmouth adopts the State Building Code, which adopts by reference the International Plumbing Code, 2015 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 1204
PLUMBING

~~SECTION 101 GENERAL~~

~~*Insert in blank space:*~~

~~**101.1 Title.** "The City of Portsmouth, New Hampshire."~~

~~*Edit subsection as follows:*~~

~~**101.2 Scope.** *Delete* the second sentence in its entirety. In the last sentence *delete* reference to the "International Fuel Gas Code" and *replace* text with the "National Fuel Gas Code, NFPA 54".~~

~~*Add new subsection to read as follows:*~~

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

~~SECTION 102 APPLICABILITY~~

~~*Add new subsections to read as follows:*~~

~~**102.8.1 Electrical.** 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. Wherever 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.~~

~~**102.8.2 Gas.** The provisions of the National Fuel Gas Code, NFPA 54, shall apply to the installation of fuel gas piping from the point of delivery (meter) to the gas appliances, equipment, or 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.~~

~~**102.8.3 Property maintenance.** The City of Portsmouth does not adopt the International Property Maintenance Code and any reference to it in this Code shall not direct the reader to its contents or requirements.~~

~~**102.8.4**~~ **1204.1.1 Sewage disposal.** ~~The City of Portsmouth does not adopt the International Sewage Disposal Code and any reference to it in this Code shall not direct the reader to its contents or requirements. Private sewage disposal systems shall meet the requirements of City ordinances, State Law and RSA 485-A:29-44.~~ **Private sewage disposal systems shall meet the requirements of City ordinances, State Law and RSA 485-A:29-44.**

~~SECTION 103 DEPARTMENT OF PLUMBING INSPECTION~~

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

~~**103.1 General.** The Inspection Department's executive official is the Chief Building Inspector. There shall be a Plumbing/Mechanical Inspector assigned to this department, and he/she will report to the Chief Building Inspector. For the purposes of this Code, the Plumbing/Mechanical Inspector shall be referred to as the *code official*.~~

~~SECTION 106 PERMITS~~

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

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

~~*Add new subsection to read as follows:*~~

~~**106.3.1.1 Food establishment documentation**. All new and renovated food establishments shall submit plumbing designs as required in Section 106.3.1.~~

~~*Delete the following subsection without substitution:*~~

~~**106.4 By whom application is made.**~~

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

~~**106.5 Permit issuance.** The construction documents and other data filled by an applicant for a permit shall be reviewed by the code official. If the code official finds that the proposed work conforms to the requirements of this code and all laws and ordinances applicable thereto, and the fees specified in Section 106.5 have been paid, a permit shall be issued to the applicant. Work shall be done in accordance with the submitted construction documents presented at the time of permit issuance.~~

~~Plumbing permits shall only be issued to current New Hampshire Master Plumbers; resident owners of single family homes for work in said home and in which the owner currently resides; and to persons engaged in the installation and servicing of water softeners or swimming pools. All permits shall be obtained in person by the qualified person taking responsibility for the work. Plumbing permits shall not be transferable. All work shall be done in accordance with the submitted construction documents.~~

~~The code official shall have the authority to issue a permit for the construction of part of a plumbing system before the entire construction documents for the whole system have been submitted, provided adequate information and detailed statements have been filed complying with all pertinent requirements of this Code. The holder of the partial permit shall proceed at their own risk without assurance that the permit for the entire plumbing system will be granted.~~

~~*Delete the following subsection without substitution:*~~

~~**106.5.1 Approved construction documents.**~~

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

~~**106.5.3 Expiration and extensions.** Every permit issued shall become invalid if the authorized work is not commenced within one year after issuance of the permit, or if the authorized work is suspended or abandoned for a period of one year after the time of commencing the work. The building official may grant one (1), extension of time not exceeding twelve (12) months if there is reasonable cause and only when requested in writing prior to the permit expiration date. Said extension will only be authorized when it does not conflict with any local laws or ordinances governing the construction work. For a permit to be considered active, periodic inspections must be requested and work progress documented by inspections. Work elements shall be items associated with the plumbing permit scope of work.~~

~~*Delete the following subsection without substitution:*~~

~~**106.5.4 Extensions.**~~

~~*Add new subsection to read as follows:*~~

~~**106.5.9 Outstanding permits.** Any person or company with outstanding or expired permits, for work that has been completed and not inspected, may be denied issuance of new permits, until all prior work has passed all required inspections.~~

~~*Delete the following subsection without substitution:*~~

~~**106.5.6 Retention of construction documents.**~~

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

~~**106.6.1 Work commencing before permit issuance.** Any person who commences any work on plumbing systems, equipment, pipes, or fixtures without first obtaining the required permit(s) shall, upon issuance of said permit(s), be assessed a fee as 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.~~

~~**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 107.2.5.4 for reinspection fees.~~

106.6.3 Fee refunds. The code official shall authorize the refunding of fees as follows:

1. The full amount of any fee paid hereunder which was erroneously paid or collected.

2. Not more than 50% of the permit fee paid when no work has been done under a permit issued in accordance with this Code.

3. Not more than 50% of the plan review fee paid when an application for a permit for which a plan review fee has been paid, is withdrawn or canceled before any plan review effort has been expended.

The code official shall not authorize the refund of any fee paid, except upon written request filed by the original permittee not later than one year after the date of fee payment. Refunds shall not be issued on permits that have expired under the conditions of Section 106.5.3.

Add new subsection to read as follows:

106.6.4 City construction projects. Fees shall not be assessed for work associated with projects undertaken by the City of Portsmouth. These projects may also include contract work done by private contracting firms hired directly by the City. This exemption shall not apply to projects done by the State Department of Public Works, Pease Development Authority, State Port Authority or the Portsmouth Housing Authority.

SECTION 107 INSPECTIONS AND TESTING

Add sentence to end of subsection to read as follows:

107.2 Required inspections and testing. "The permit holder shall allow a minimum of two work days (48 hours) from the time the inspector is notified to the time the inspection is scheduled and shall be present during the required inspections."

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 and written notice (including the specific code sections) will be provided clearly identifying the deficiencies. 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 plumbing work and a 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 109 MEANS OF APPEAL~~

~~*Delete entire Section 109 and substitute with the following:*~~

~~**109.1 Application for appeals.** Refer to City Ordinance Chapter 12, Part 1, Appendix B as amended (City Building Code), for the procedure to follow when an appeal from the provisions of this Code is being requested and for the membership and qualifications of the Board of Appeals.~~

~~SECTION 202 GENERAL DEFINITIONS~~

1204.2 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).

Food service establishment: Any fixed or mobile restaurant, temporary food service establishment, coffee shop, cafeteria, short order cafe, luncheonette, grill, tearoom, sandwich shop, soda fountain, tavern, bar, cocktail lounge, night club, industrial food service establishment, catering kitchen, commissary and any other eating or drinking establishment where food or beverages are prepared or served; whether private, public, profit or non-profit.

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

1204.3 Protection of pipes and plumbing system components.

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

~~**305.4**~~ **1204.3.1 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:*~~

~~**305.4.1**~~ **1204.3.2 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 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:*~~

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

~~*Edit subsection as follows:*~~

~~**312.5 Water supply system test.** *Delete* the words: "or, for piping systems other than plastic" in the first sentence.~~

~~SECTION 403 MINIMUM PLUMBING FACILITIES~~

~~*Add new exception 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 404 ACCESSIBLE PLUMBING FACILITIES~~

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

404.1 Where required. Accessible plumbing facilities and fixtures shall be provided in accordance with the International Building Code and State of New Hampshire Architectural Barrier Free Design Standards.

SECTION 405 INSTALLATION OF FIXTURES

Add new subsections to read as follows:

405.3.6 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.

405.3.7 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.

> **Exception:** Showers complying with the Exception in Section 417.4 shall have a minimum ceiling height of 6'-8" above an area 25 inches by 30 inches at the showerhead

SECTION 418 SINKS

Add new subsections to read as follows:

418.4 Service/utility sinks or curbed mop base. Use groups requiring service sinks are found in Table 403.1. Service sink faucet spouts which accommodate a hose connection shall require backflow protection as required in Section 608.2. Food service establishments shall have a service/utility sink or curbed mop base installed on the main food preparation floor level and on any floor level where food is prepared and where dish or pot washing takes place. This sink shall be placed close to the kitchen area or as approved by the Health Department.

418.5 Pre-rinse sink. All food service establishment kitchens shall have a pre-rinse sink adjacent to the automatic dishwasher. The pre-rinse sink shall be adjacent to the 3 compartment pot sink in kitchens allowed to omit the dishwasher. The pre-rinse sink shall drain to the grease interceptor.

SECTION 419 URINALS

Change subsection to read as follows:

419.1 Approval. Urinals shall conform to ANSI Z124.9, ASME A112.19.2M, CSA B45.1, or CSA B45.5. Urinals shall conform to the water consumption requirements of Section 604.4. Water supplied urinals shall conform to the hydraulic performance requirements of ASME A112.19.6, CSA B45.1 or CSA B45.5. If a no-water urinal is installed, a water supply line shall

~~be sized and installed as if a water supplied urinal were being installed. Said supply line shall be properly capped and may be buried within the building construction at the urinal location.~~

~~SECTION 501 GENERAL~~

~~*Add new subsection To read as follows:*~~

~~501.9~~ **1204.4 Minimum water heater temperatures.** Tank type water heaters and indirect fired hot water storage tanks shall be maintained at a minimum temperature of 140 degrees F (60 degrees C) and shall be equipped with a temperature controlling device conforming to ASSE 1017 to limit the maximum hot water temperature to ~~faucets~~ **faucets** as required by this code. **1204.2 restricts the upper end temperature of hot water to 130 degrees Fahrenheit.**

~~SECTION 603 WATER SERVICE~~

1204.5 Water Service.

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

~~603.1~~ **1204.5.1 Size of water service pipe.** The water service pipe shall be sized to supply water to the structure in quantities and at the pressures required in **the City Building** ~~this c~~Code. The minimum diameter of water service pipe shall be 1 inch.

~~SECTION 605 MATERIALS, JOINTS AND CONNECTIONS~~

~~*Amend Table 605.3 as follows:*~~

~~**Table 605.3 Water service pipe.** *Delete all materials* except type K copper for all pipe up to and including 3 inches (3") in diameter **and** cement lined ductile iron for pipe over 3 inches (3") in diameter.~~

1204.5.2 Materials, joints and connections. For water service pipe up to and including 3 inches (3”) in diameter only type K copper or CT Pex shall be used. For water service pipe over 3 inches (3”) in diameter only cement lined ductile iron shall be used.

~~SECTION 607 HOT WATER SUPPLY SYSTEMS~~

1204.6 Hot water supply systems.

~~*Add new subsection to read as follows:*~~

~~607.1.3~~ **1204.6.1 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).

~~SECTION 608 PROTECTION OF POTABLE WATER SUPPLY~~

1204.7 Protection of potable water supply.

Change subsection to read as follows:

~~608.14~~ **1204.7.1 Portsmouth Water Department backflow prevention criteria.** Backflow prevention at the water meter shall be accordance with ~~Section 608.14.1 through 608.14.1.6, and Section 608.16.5.~~ **1204.7.1.1 through 1204.7.1.7.**

~~*Delete the following subsection without substitution:*~~

~~**608.14.1 Outdoor enclosures for backflow prevention.**~~

~~*Add new subsections to read as follows:*~~

~~608.14.1~~ **1204.7.1.1 Multiple tenant spaces.** All buildings that have more than three tenants or tenant spaces being served by one water service shall have two backflow preventers installed in parallel for uninterrupted service. When the building or tenant space does not have a known tenant, the water service to that building or tenant space shall have a reduced pressure zone backflow preventer installed on the building side of the water meter.

~~608.14.1.2~~ **1204.7.1.2 Dual check valve assemblies.** All new residential water services of less than or equal to 1 inch in size shall have at a minimum, a dual check valve backflow prevention assembly conforming to ASSE 1024. ~~listed in Chapter 13.~~ Said assembly shall be installed on the water distribution side of the water meter, without a water meter bypass feature. Thermal expansion of water shall be addressed per ~~Section 607.3.2.~~ the **New Hampshire Building Code.**

~~608.14.1.3~~ **1204.7.1.3 Existing water service.** When replacing or upgrading an existing water distribution piping system, a dual check valve backflow prevention assembly shall be installed on the water distribution side of the water meter, without a water meter bypass feature. Thermal expansion of water shall be addressed per ~~Section 607.3.2.~~ per the **New Hampshire Building Code**.

~~608.14.1.4~~ **1204.7.1.4 Double check-valve assemblies.** All new residential water services greater than 1 inch in size shall have at a minimum, a double check-valve assembly in accordance with the City of Portsmouth *Backflow Prevention Ordinance* listed in Chapter 16.

~~608.14.1.5~~ **1204.7.1.5 Bypass lines.** Bypass lines around required backflow preventers shall be protected with a backflow preventer of the same type in the bypass line. Refer to the City of Portsmouth *Backflow Prevention Ordinance* listed in Chapter 16 for additional backflow prevention requirements.

~~608.14.1.6~~ **1204.7.1.6 Auxiliary wells or water supplies.** Whenever an auxiliary well or water supply serves property that also has a domestic water service, the domestic water service shall have a reduced pressure principle backflow preventer installed on the water distribution side of the water meter in accordance with the City of Portsmouth *Backflow Prevention Ordinance* listed in Chapter 16**:**

> **Cross Connections. No Cross Connection shall be permitted between the public water supply and any other water supply, or between the public water supply and any plumbing fixture, device, or appliance capable of contaminating the public water**

supply unless the connection is protected at the metering point by a backflow prevention device as required by this ordinance. The connection shall be approved by the Utility and the New Hampshire Department of Environmental Services, and shall satisfy in all respects the laws of the State of New Hampshire.

Change subsection to read as follows:

608.16.5 ~~**1204.7.1.7**~~ **Connection to lawn irrigation systems.** The potable water supply to lawn irrigation systems shall be protected against backflow by a pressure-type vacuum breaker or a reduced pressure principle backflow preventer. Where chemicals are introduced into the system, the potable water supply shall be protected against backflow by a reduced pressure principle backflow preventer.

~~*Edit subsections as follows:*~~

~~**608.16.8 Portable cleaning equipment.** *Delete reference to* Section 608.13.7 and *insert reference to* Section 608.13.5.~~

~~**608.16.9 Dental pump equipment.** *Delete reference to* Section 608.13.6.~~

~~SECTION 701 SANITARY DRAINAGE~~

~~*Change subsection to read as follows:*~~
1204.8 Sanitary drainage.

~~**701.2**~~ **1204.8.1 Sewer required.** Every building in which plumbing fixtures are installed and all premises having drainage piping shall be connected to a public sewer where available or an approved private disposal system. A building is considered available to a public sewer when said building is within 150 feet of a public sewer line. When a private subsurface disposal system is provided, a site plan shall document its location on the lot. Subsurface systems shall meet the requirements of RSA 485-A:29-44. **A backwater valve shall be added to existing structures undergoing remodels or adding/finishing basement levels.**

~~SECTION 705 JOINTS~~

~~*Edit subsections as follows:*~~

~~**705.11.2 Solvent cementing**. *Delete* the word "purple" in the second sentence.~~

~~SECTION 905 VENT CONNECTIONS AND GRADES~~
1204.9 Vent connections and grades.

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

~~**905.6**~~ **1204.9.1 Vent for future fixtures.** Within a habitable or occupiable space at the lowest level of a structure where plumbing fixtures are not installed, there shall be made available an accessible vent connection, not less than 2" inch diameter, which is properly connected to the vent system to provide for future venting.

~~SECTION 912 WET VENTING~~

~~*Amend Table 912.3 as follows:*~~

~~**Table 912.3 Wet Vent Sizing.** *Delete* 1-1/2 inch Wet Vent Pipe Size and 1 Drainage Fixture Unit Load from table.~~

~~SECTION 918 AIR ADMITTANCE VALVES~~

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

~~**918.3 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 valve. 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 918.3.1. Stack type air admittance valves shall conform to Section 918.3.2.~~

~~SECTION 1003 INTERCEPTORS AND SEPARATORS~~

1204.10 Interceptors and Separators.

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

~~**1003.2**~~ **1204.10.1 Approval.** All interceptors and separators shall be of the type and capacity approved by the City Engineer. Each interceptor and 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. When exceptions are granted under the conditions of ~~Section 1003.3~~ 1204.10.2, the applicant shall obtain in writing, approval from the City Engineer for said exceptions. Waste exempted from treatment by the City Engineer, shall not be discharged into separators or interceptors.

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

~~**1003.3**~~ **1204.10.2 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 1:** When adequate in-ground space is not available outside on the lot, a grease interceptor approved by the City Engineer and sized in accordance with ~~section 1003.3.4~~ **the New Hampshire Building Code** shall be installed inside.
>
> **Exception 2:** When the Health officer and City Engineer do not feel the type of food service establishment warrants such protection.

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 as listed in ~~Section 1003.3.4~~ **the New Hampshire Building Code**.

~~*Add sentence to end of subsection to read as follows:*~~

~~**1003.4**~~ **1204.10.3 Oil separators required.** ~~"~~The City Engineer shall approve all oil separator designs.~~"~~

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

~~**1003.10**~~ **1204.10.4 Access and maintenance of interceptors and separators.** All interceptors and separators shall be located to provide easy access for cleaning and inspection. Interceptors shall not be located in a pit below a slab on grade. Interceptors and separators shall be inspected cleaned and repaired regularly as needed by the building owner at their expense. The building owner shall be responsible for the proper removal and disposal by appropriate means of the captured materials and shall maintain records of the dates and means of disposal. Said records shall be subject to periodic review by the City Engineer, City Health Officer or **Building** ~~Code~~ Official. Only licensed waste disposal companies shall perform removal and disposal operations of the collected materials.

1204.11 Exterior showers.

1204.11.1 Exterior showers. Exterior showers require a roof and an enclosure that is approved by the Building Official.

1204.11.2 Rinse stations. Exterior rinse stations do not require a roof and shall not include a drain that discharges into the City sewer. The discharge of grey water while using a rinse station is strictly prohibited. Greywater refers to laundry, dish, and bath/shower water; Greywater has adverse effects on aquatic life and public health by negatively impacting drinking water supplies, recreational activities, and wildlife.

1204.1.2 Floor drains. Floor drains shall be reviewed and approved by the City Engineer.

~~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) 271-7965~~

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)

New Hampshire Energy Code
Public Utilities Commission
21 South Fruit Street, Suite 10
Concord, NH 03301-2429
(603) 271-2431

City of Portsmouth Backflow Prevention Ordinance 608.14
Chapter 16 608.16.5
City of Portsmouth New Hampshire
Department of Public Works, Water Division
680 Peverly Hill Road
Portsmouth, NH 03801
(603) 766-1413

*Add in the **NFPA** section the following referenced Standards:*

54-15 National Fuel Gas Code 101.2, 102.8.2

*Amend in the **NFPA** section the following referenced Standards:*

Change 70-**14** *to* **70-17** National Electric Code 102.8.1, 502.1
504.3, 1113.1.3

APPENDIX A – PLUMBING PERMIT FEE SCHEDULE
Appendix A is not adopted as part of this ordinance.

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

APPENDIX C – STRUCTURAL SAFETY
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.

CHAPTER 15
Part II

INTERNATIONAL MECHANICAL CODE, 2015
(Adopted 12/02/2019)

SECTION 1205

MECHANICAL

The City of Portsmouth adopts the State Building Code, which adopts by reference The International Mechanical Code, 2015 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 101 GENERAL

Insert in blank space:

101.1 Title. "the City of Portsmouth, New Hampshire"

Edit subsection as follows:

101.2 Scope. *Delete the reference*, "International Fuel Gas Code" and *replace with the reference*, "*National Fuel Gas Code*, NFPA 54."

SECTION 102 APPLICABILITY

Add new subsections to read as follows:

102.8.3 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.

102.8.4 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.

102.8.5 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.

102.8.6 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 103 DEPARTMENT OF BUILDING SAFETY

Change subsection to read as follows:

103.1 General. The Inspection Department's executive official is the Chief Building Inspector. There shall be a Plumbing/Mechanical Inspector assigned to this department, and he/she will report to the Chief Building Inspector. For the purposes of this Code, the Plumbing/Mechanical Inspector shall be referred to as the *code official*.

SECTION 106 PERMITS

Change subsection to read as follows:

106.3 Mechanical permits. Mechanical 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:

106.4 Permit issuance. The construction documents and other data filled by an applicant for a permit shall be reviewed by the code official. If the code official finds that the proposed work conforms to the requirements of this code and all laws and ordinances applicable thereto, and the fees specified in Section 106.5 have been paid, a permit shall be issued to the applicant. Work shall be done in accordance with the submitted construction documents presented at the time of permit issuance.

Mechanical permits shall only be issued to resident owners of single family homes for work in said home in which the owner currently resides, and to businesses engaged in the installation of any heating, cooling, air conditioning or domestic water heating systems. All permits shall be obtained in person by the *qualified person or agency* taking responsibility for the work. Mechanical permits shall not be transferable.

For gas piping work and the installation and repair of all gas fired equipment, a *qualified person* shall be any person who conforms to the SAFE-C-8000 *Licensing of Fuel Gas Fitters* rules, as regulated by The State of New Hampshire Division of Fire Safety.

The code official shall have the authority to issue a permit for the construction of part of a mechanical system before the entire construction documents for the whole system have been submitted, provided adequate information and detailed statements have been filed complying with all pertinent requirements of this Code. The holder of the partial permit shall proceed at their own risk without assurance that the permit for the entire mechanical system will be granted.

Delete the following subsection without substitution:

106.4.1 Approved construction documents.

Change subsection to read as follows:

106.4.3 Expiration and extensions. Every permit issued shall become invalid if the authorized work is not commenced within one year after issuance of the permit, or if the authorized work is suspended or abandoned for a period of one year after the time of commencing the work. The building official may grant one (1), extension of time not exceeding twelve (12) months if there is reasonable cause and only when requested in writing prior to the permit expiration date. Said extension will only be authorized when it does not conflict with any local laws or ordinances governing the construction work. For a permit to be considered active, periodic inspections must

be requested and work progress documented by inspections. Work elements shall be items associated with the mechanical permit scope of work.

Delete the following subsection without substitution:

106.4.4 Extensions.

Add new subsection to read as follows:

106.4.9 Outstanding permits. Any person or company with outstanding or expired permits, for work that has been completed and not inspected, may be denied issuance of new permits, until all prior work has passed all required inspections.

Change subsections to read as follows:

106.5.1 Commencing work before permit issuance. Any person who commences any work on mechanical equipment, systems, pipes, ducts or fixtures without first obtaining the required permit(s) shall, upon issuance of said permit(s), be assessed a fee in accordance with Chapter 1, Article XVI or similar wording, of the Ordinances of the City of Portsmouth, NH.

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 107.3.4 for reinspection fees.

Edit subsection as follows:

106.5.3 Fee refunds:

Insert in blank spaces: 2. "50%"; 3. "50%"

In last paragraph substitute "one year" *in place of* "180 days".

Add sentence to end of last paragraph:

"Refunds shall not be issued on permits that have expired under the conditions of Section 106.4.3."

Add new subsection to read as follows:

106.5.4 City construction projects. Fees shall not be assessed for work associated with projects undertaken by the City of Portsmouth. These projects may also include contract work done by private contracting firms hired directly by the City. This exemption shall not apply to projects done by the State Department of Public Works, Pease Development Authority, State Port Authority or the Portsmouth Housing Authority.

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. 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.

Add sentence to end of subsection:

107.4 Approval. "Said notice shall be the completed permit inspection log form."

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 and a 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.

108.5 Stop work orders: *Insert in the first blank:* "$100.00"; *Insert in the second blank:* "$1,000.00"

SECTION 109 MEANS OF APPEAL

Delete the entire section and substitute with the following:

109.1 Application for appeal. Refer to City Ordinance Chapter 12, Part 1, Appendix B as amended (City Building Code), for the procedure to follow when an appeal from the provisions of this Code is being requested and for the membership and qualifications of the Board of Appeals.

SECTION 202 GENERAL DEFINITIONS

Add new definition to subsection:

Food service establishment. Any fixed or mobile restaurant, temporary food service establishment, coffee shop, cafeteria, short order cafe, luncheonette, grill, tearoom, sandwich shop, soda fountain, tavern, bar, cocktail lounge, night club, industrial food service establishment, catering kitchen, commissary and any other eating or drinking establishment where food or beverages are prepared or served; whether private, public, profit or non-profit.

SECTION 303 EQUIPMENT AND APPLIANCE LOCATION

1205.1 Equipment and appliance location.

Add new subsection to read as follows:

303.9 1205.1.1 Equipment noise. Refer to the City of *Portsmouth Zoning Ordinance*, **Chapter 10, Article 13** for the limitations of excessive noise from mechanical equipment operations. Noise from mechanical equipment shall not exceed the levels so stated.

SECTION 501 EXHAUST SYSTEM

1205.6 Exhaust system.

Add new subsection to read as follows:

501.6 1205.6.1 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

1205.7 Commercial kitchen hoods.

1205.7.1 Reserved.

Add exception 4 in subsection to read as follows:

Exception 4. Cooking equipment that has been listed in accordance with ANSI/UL 197 or an equivalent standard for reduced emissions shall not be required to be provided with an exhaust system. Spaces in which such systems are located shall be considered to be kitchens and shall be ventilated in accordance with table 403.3. For the purpose of determining the floor area required to be ventilated, each individual appliance shall be considered as occupying not less than 100 square feet (9,3m2).

SECTION 509 FIRE SUPPRESSION SYSTEMS

Add subsection to read as follows:

509.2 NFPA 96. The following amendments to NFPA 96 are hereby incorporated into this code:

Chapter 10 Fire-Extinguishing Equipment

Add new subsections to read as follows:

109.3 Initial System Test.

109.3.1 Prior to placing the cooking equipment in service, all the systems shall be tested as required by the City of Portsmouth Range Hood Test Report Form. The suppression test shall use a substitute non-flammable gas in place of the UL 300 suppression agent.

109.3.2 When the conditions I Section 10.2.3.1 apply, a re-test of all the systems as stated in Section 10.9.3.1 shall be performed.

Chapter 11 Procedures for the Use and Maintenance of Equipment

Add new sentence to end of subsection:

11.6 Cleaning of Exhaust Systems.

11.6.2* "The methods, tools and values outlined in Annex A, Section A.11.6.2 and Figure A.11.6.2 shall become mandatory requirements of this Section."

End of NFPA 96 Amendments

SECTION 801 CHIMNEYS AND VENTS

1205.8 Chimneys and vents.

Change subsections to read as follows:

801.1 Scope. This chapter shall govern the installation, maintenance, repair and approval of factory-built chimneys, chimney liners, vents and connectors. This chapter shall also govern the utilization of masonry chimneys. Gas-fired appliances shall be regulated in accordance with the *National Fuel Gas Code*, NFPA 54.

801.3 1205.8.1 Masonry chimneys. Masonry chimneys shall be constructed in accordance with the **New Hampshire***International* Building Code and **New Hampshire Fire Code (**NFPA 211, *the Standard for Chimneys, Fireplaces, Vents, and Solid Fuel-Burning Appliances***)**.

SECTION 902 MASONRY FIREPLACES

1205.9 Masonry fireplaces.

Change subsection to read as follows:

902.1 1205.9.1 General. Masonry fireplaces shall be constructed in accordance with the *International* ***New Hampshire*** *Building Code* and **the New Hampshire Fire Code (**NFPA 211, *the Standard for Chimneys, Fireplaces, Vents, and Solid Fuel-Burning Appliances***)**.

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) 271-7965

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

*Add in the **NFPA** section the following referenced Standards:*

54-15 National Fuel Gas Code 101.2, 102.8, 801.1

70-17 National Electric Code 102.8

96-11 Ventilation Control and Fire Protection 102.8.4
of Commercial Cooking Operations

*Amend in the **NFPA** section the following referenced Standards:*

Change 31-**06** *to* 31-**11** Standard for Installation of Oil Burning Equipment

Change 58-**04** *to* 58-**14** Liquefied Petroleum Gas Code

Change 211-**0** to 211-**13** Standards for Chimneys,
Fireplaces, Vents and Solid Fuel-Burning Appliance

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 not adopted as part of this ordinance.

CHAPTER 15
PART III
NATIONAL FUEL GAS CODE
SECTION 1206
FUEL GAS

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.

Section 7.2 Installation of Piping.

1206.1 Installation of piping.

1206.1.1 Reserved.

Add new subsections to read as follows:

7.2.6.1 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.

7.2.6.2 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.

7.2.6.3 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.

7.2.6.4 CSST Used as an Appliance Connection. CSST shall not be used as a flexible appliance connector downstream of the appliance shutoff device.

7.3.6.5 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.

7.2.6.6 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 1½ 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 30 inches when connected to a gas fired roof top unit or similar gas equipment.

Section 12.5 Type of Venting Systems to be Used.

1206.2 Type of venting systems to be used.

Change subsection to read as follows:

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

Section 12.9 Through the wall vent termination.

Add new subsection to read as follows:

12.9.7 1206.2.1 Through -the -wall vents for mechanical draft vented appliances shall terminate a minimum of 5 ft from property lines.

End of NFPA 54 Amendments.

~~**CHAPTER 15**~~

~~**PART IV**~~

~~**NATIONAL ELECTRICAL CODE, 2017**~~
SECTION 1207
ELECTRICAL

~~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.~~

1207.1 Definitions

1207.1.1 Townhouse. A single-family dwelling unit constructed in a group of three or more attached units in which each unit demising wall extends from foundation to roof and with a yard or public way on not less than two sides. The fire rated wall from the concrete basement floor or slab shall be unbroken to the underside of the roof sheathing without any electrical through penetration.

1207.1.2 Enclosed interior exit stairway (stair tower). Interior exit stairways not located in townhouses and one and two family dwellings serving as an exit component shall be enclosed and fire rated and lead directly to the exterior of the building. The stairway shall not be used other than for means of egress. (i.e. storage, seating, etc.).

1207.4 GFCI protection

1207.4.1 Dwelling units. All 125-volt through 250-volt outlets and receptacles installed in the locations specified in NFPA 70 and supplied by single-phase branch circuits rated 150 volts or less to ground shall have ground-fault circuit-interrupter protection for personnel.

1207.4.2 Other than dwelling units. All 125-volt through 250-volt outlets and receptacles supplied by single-phase branch circuits rated 150 volts or less to ground, 50 amperes or less, and all receptacles supplied by three-phase branch circuits rated 150 volts or less to ground, 100 amperes or less, installed in the locations specified in NFPA 70 shall have ground-fault circuit-interrupter protection for personnel.

1207.4.3 General. The following appliances rated 120 thru 250 volts and 60 amperes or less, single- or 3-phase, shall be provided with class-A GFCI protection for personnel. Multiple class- A GFCI protective devices shall be permitted but shall not be required.

1. **Automotive vacuum machines**
2. **Drinking water coolers and bottle fill stations**
3. **Cord-and-plug-connected high-pressure spray washing machines**
4. **Tire inflation machines**
5. **Vending machines**
6. **Sump pumps**
7. **Dishwashers**
8. **Ranges, ovens, and grills**
9. **Electric dryers**
10. **Mixers in commercial kitchens**
11. **Any cooking appliance in commercial kitchens**
12. **Hotplates, crock pots**

~~**(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.~~

~~**(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.~~

~~**(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.~~

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

~~**230 Service, 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.~~

~~(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~~

1207.2 NM/NMC (Romex)

~~334.10 Uses Permitted.~~ ~~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.~~

1207.2.1 Uses permitted. Type NM and Type NMC cables shall be allowed in one- and two-family dwellings and townhouses, their attached or detached garages, and their storage buildings except as prohibited by NFPA 70.

1207.2.2 Uses not permitted. Type NM and Type NMC cables shall not be exposed within a dropped or suspended ceiling cavity in other than one and two family and townhouses

~~**(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.~~

~~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.~~

~~*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).~~

~~(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.~~

~~*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.~~

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

1207.3 SER/SE (service entrance cable)

1207.3.1 Uses permitted.

1207.3.1.1 Service-Entrance conductors. Service-entrance cable shall be permitted to be used as service-entrance conductors in townhouses and one and two family dwellings and shall be installed in accordance with NFPA 70

1207.3.1.2 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 in townhouses and one and two family dwellings.

~~338.12~~ **1207.3.2** Uses Not Permitted.

~~(A)~~ Service-Entrance Cable **(SE)**. Service-entrance cable ~~(SE)~~ shall not be used ~~under the following conditions or in the following locations,~~ **in any type of building or structure other than townhouses and** ~~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.~~

1207.5 Arc fault protection. Reserved

1207.6 Identification of electrical systems.

1207.6.1 Emergency system. Emergency circuits shall be permanently marked in yellow so they will be readily identified as a component of an emergency circuit or system by the following methods:

1. **All boxes and enclosures (including transfer switches, generators, and power panels) for emergency circuits shall be permanently marked in yellow as a component of an emergency circuit or system.**

2. **Where boxes or enclosures are not encountered, exposed cable or raceway systems shall be permanently marked in yellow to be identified as a component of an emergency circuit or system, at intervals not to exceed 7.6 m (10 ft).**

3. **Receptacles supplied from the emergency system shall have a distinctive color or marking on the receptacle cover plates or the receptacles identified in yellow.**

   Note: If a system for an existing building has a different color for the system than this section, then existing color shall be continued in the building

1207.6.2 Boxes, enclosures, raceways. In a building or at a structure where a critical operations power system and any other type of power system are present, all boxes and enclosures (including transfer switches, generators, and power panels) for critical operations power system circuits shall be permanently marked in blue so they will be readily identified as a component of the critical operations power system. All raceways must be permanently marked every 10' in blue so will be readily identified as a component of a critical operation power system.

1207.6.3 Receptacles. In a building in which critical operations power systems (COPS) are present with other types of power systems described in other sections in this article, the cover plates for the receptacles or the receptacles themselves supplied from the COPS shall have a distinctive blue color or marking so as to be readily identifiable. Non-locking-type, 125-volt, 15- and 20-ampere receptacles supplied from the COPS shall have an illuminated face or an indicator light to indicate that there is power to the receptacle

1207.6.4 Life safety and critical. The life safety branch and critical branch [of the essential electrical system] shall be kept independent of all other wiring and equipment. Raceways, cables, or enclosures of the life safety branch must be identified in yellow and critical branch shall be readily identified in orange as a component of the essential electrical system (EES). Boxes and enclosures (including transfer switches, generators, and power panels) shall be field- or factory-marked and identified as a component of the EES. Raceways and cables shall be field- or factory-marked as a component of the EES at intervals not to exceed 7.6 m (10 ft).

1207.6.5 Photovoltaic Unless located and arranged so the purpose is evident, the following wiring methods and enclosures that contain PV system AC and DC circuit conductors shall be marked with the wording PHOTOVOLTAIC POWER SOURCE or SOLAR PV DC CIRCUIT, or SOLAR PV AC CIRCUITS by means of permanently affixed labels or other approved permanent marking:

1. Exposed raceways, cable trays, and other wiring methods

2. Covers or enclosures of pull boxes and junction boxes

3. Conduit bodies in which any of the available conduit openings are unused

The labels or markings shall be visible after installation. All letters shall be capitalized and shall be a minimum height of 9.5 mm (⅜ in.) in white on a red background. Labels shall appear on every section of the wiring system that is separated by enclosures, walls, partitions, ceilings, or floors. Spacing between labels or markings, or between a label and a marking, shall not be more than 3 m (10 ft). Labels required by this section shall be suitable for the environment where they are installed.

1207.7 Definitions specific to 1207.6 thru 1207.6.4

1. Critical Branch.
   A system of feeders and branch circuits identified in orange supplying power for task illumination, fixed equipment, select receptacles, and select power circuits serving areas and functions related to patient care that are automatically connected to alternate power sources by one or more transfer switches during interruption of the normal power source.
2. Equipment Branch.
   A system of feeders and branch circuits identified in green arranged for delayed, automatic, or manual connection to the alternate power source and that serves primarily 3-phase power equipment.
3. Essential Electrical System.
   A system comprised of alternate sources of power and all connected distribution systems and ancillary equipment, designed to ensure continuity of electrical power to designated areas and functions of a health care facility during disruption of normal power sources, and also to minimize disruption within the internal wiring system.
4. Life Safety Branch.
   A system of feeders and branch circuits identified in yellow supplying power for lighting, receptacles, and equipment essential for life safety that is automatically connected to alternate power sources by one or more transfer switches during interruption of the normal power source.

1207.8 Generators.

1207.8.1 Location.

1. Generator shall not be installed within 5’ of any building or structure without manufacturer’s approval and as specified in the New Hampshire Fire Code.

2. Generator exhaust shall not be located within 5’ of any building or structure.

3. Generator shall be located at least 10’ from openings in walls. This section recognizes the potential danger of deadly carbon monoxide gas entering the structure and injuring the occupants. Building openings could be, but are not limited to, the following:

1. Basement doors & bulkhead openings

2. Basement windows

3. Exit doors or sliding glass openings

4. Operable windows

5. Dryer vents

6. Kitchen appliance vents

7. Mechanical exhaust vents for heating or hot water appliances

8. Air intake openings or screens

1207.9 Electrical system disconnecting means.

1207.9.1 Remote emergency shutdown. Generators with greater than 8 KW rating, other than cord connected portable generators shall be provided with a remote emergency stop switch to shut down the prime mover. The remote emergency stop switch shall be located outside the equipment room or generator enclosure, an additional remote emergency shutdown device shall be installed next to the service disconnect, said device shall also meet the requirements of the NFPA 70.

1207.9.2 Emergency shutdown for One- and Two-Family dwelling units.
For other than cord-and-plug-connected portable generators, an emergency shutdown device shall be located outside the dwelling unit at a readily accessible location next to the service disconnect outside the dwelling, or next to the meter in existing dwelling where the service conductors enter the dwelling.

1207.9.3 Emergency disconnect - battery system. For one family and two family dwellings, a disconnecting means or its remote control for a stationary battery system shall be located at a readily accessible location outside the building next to the service disconnecting means or meter for emergency use. The disconnect shall be labeled "EMERGENCY DISCONNECT FOR BATTERY SYSTEM"

1207.9.4 Rapid shutdown of PV systems on buildings. PV system circuits installed on or in buildings shall include a rapid shutdown function to reduce shock hazard for firefighters in accordance with the NFPA 70. The rapid shutdown device shall be located at the service disconnect or meter location for a townhouse or one and two family dwelling.

1207.10 Device or equipment fill. For each yoke or strap containing large devices such as GFCI's, dimmer switches, motion sensors, and large 2-gang devices capable of containing one or more devices or equipment, 4 times the volume allowance.

1207.11 Marina protection. Where more than three receptacles supply shore power to boats, a leakage current measurement device shall be available (a meter specially designed for measuring leakage currents), and be used to determine leakage current from each boat that will utilize shore power. An automatic measuring device shall be installed on the docks that will trip the GFPE device feeding the docks. This device shall be installed in the water to measure the current introduced by the boats, and will disconnect the feeders from the

utility source. This automatic device must run through a shunt trip breaker or other means that will disconnect the feeders to the docks. This device must be protected by a class-A GFCI for personal protection and shall not be installed on the shore power overcurrent device. The automatic measuring device must be protected from physical damage and be listed for its use. A visual strobe light and a horn shall be located on the device as this will warn personal that may be on the docks or in the water to the presence of electrical current. This device must be approved by the Building Official and installed in accordance with the manufacturers specifications.

1207.12 NFPA adoption. Pursuant to RSA 674:51-a, the City of Portsmouth, New Hampshire, hereby adopts the current final revised printed edition of the NFPA 70 / NEC, a Code promulgated by the International Code Conference.

SECTION 1208
GREEN BUILDING

1208.1 Incentives. This section is intended to incentivize and encourage the use of green building practices and materials.

1. **Photovoltaic- Reserved**
2. **Electric Vehicle Chargers- Reserved**
3. **Mini-split Heat Pumps- Reserved**
4. **Insulation- Reserved**
5. **Water conservation including the use of reclaimed or recycled water- Reserved**

1208.2 Allowance for future PV panels or EV charging station. - Reserved

1208.2.1 New Construction- Reserved

1208.2.2 Existing Buildings- Reserved

SECTION 1209
SEPERABILITY

Should any section, clause, or provision of this City Building Code be declared by a court of competent jurisdiction to be invalid, such invalidity shall not affect other provisions or applications of the City Building Code which can be given effect without the invalid provision or application, and to this end the provisions of the City Building Code are declared to be severable.