

CHAPTER 15
Part I

INTERNATIONAL PLUMBING CODE, 2009
(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, 2009 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

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, E and F 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 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.

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 Plumbing 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 107.1.2.4 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 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 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 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

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:

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

Change subsection to read as follows:

305.6 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:

305.6.1 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, 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.

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

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 remain.

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:

405.3.3 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.

405.3.4 Ceiling height above fixtures. Bathrooms and kitchen 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 410 DRINKING FOUNTAINS)

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

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.

Add new subsection o read as follows:

501.9 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 as required by this code.

SECTION 603 WATER SERVICE

Change subsection to read as follows:

603.1 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 this 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.*

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:

607.1.1 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).

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 608.14.5, and Section 608.16.5.

Delete the following subsection without substitution:

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

Add new subsections to read as follows:

608.14.1 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 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.

608.14.1.3 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.

608.14.1.4 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 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 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.

Change subsection to read as follows:

608.16.5 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 GENERAL

Change subsection to read as follows:

701.2 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.

SECTION 705 JOINTS

Edit subsections as follows:

705.8.2 Solvent cementing. *Delete the word “purple” in the second sentence.*

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

SECTION 905 VENT CONNECTIONS AND GRADES

Change subsection to read as follows:

905.6 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 909 WET VENTING

Amend Table 909.3 as follows:

Table 909.3 Wet Vent Sizing. *Delete* 1-1/2 inch Wet Vent Pipe Size and 1 Drainage Fixture Unit Load from table.

SECTION 917 AIR ADMITTANCE VALVES

Change subsection to read as follows:

917.3 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 917.3.1 or 917.3.2. Stack type air admittance valves shall conform to Section 917.3.3.

SECTION 1003 INTERCEPTORS AND SEPARATORS

Change subsection to read as follows:

1003.2 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, 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 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 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 or an AGRU as listed in Section 1003.3.4 or 1003.3.5.

Add sentence to end of subsection to read as follows:

1003.4 Oil separators required. “The City Engineer shall approve all oil separator designs.”

Change subsection to read as follows:

1003.10 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 Code Official. Only licensed waste disposal companies shall perform removal and disposal operations of the collected materials.

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) 271-3294
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/energyapg.htm
puc@puc.nh.gov

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:

54-09 National Fuel Gas Code 101.2, 102.8.2

Amend in the NFPA section the following referenced Standards:

Change 70-02 to 70-08 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 – 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 not adopted as part of this ordinance.

CHAPTER 15
Part II

INTERNATIONAL MECHANICAL CODE, 2009
(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, 2009 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:

102.8.1 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.

102.8.2 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.

102.8.3 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.

102.8.4 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 107.6 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 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.

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 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

Add new subsection to read as follows:

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

SECTION 501 GENERAL

Add new subsection to read as follows:

501.5 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 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).

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 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

CHAPTER 8 CHIMNEYS AND VENTS

SECTION 801 GENERAL

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

SECTION 902 MASONRY FIREPLACES

Change subsection to read as follows:

902.1 General. Masonry fireplaces shall be constructed in accordance with the *International Building Code* and 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) 271-3294
bldgcodebrd@dos.nh.gov

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
www.puc.state.nh.us/EnergyCodes/energygpg.htm
puc@puc.nh.gov

Add in the NFPA section the following referenced Standards:

54-09 National Fuel Gas Code	101.2, 102.8.2, 801.1,	1601.1, 1601.2
70-05 National Electric Code	102.8.1	
96-11 Ventilation Control and Fire Protection of Commercial Cooking Operations	102.8.4	

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*

Not an Official Document

CHAPTER 15
PART III
FUEL GAS INSTALLATIONS

SECTION 1001 GENERAL

1001.1 Scope. 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 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 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:

7.2.8.1 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.

7.2.8.2 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.

7.2.8.3 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.

7.2.8.4 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 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.

7.2.8.6 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 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 12.9 Through the wall vent termination.

Add new subsection to read as follows:

12.9.6 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 not adopted as part of this ordinance.

Not an Official Document

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.

Ground-fault circuit-interrupter protection for personnel shall be provided as 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.

(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:

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) 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:

Part II. Installation

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.

(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.

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 extending 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 mm (12 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.

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:

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.