# 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 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 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 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**

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

Change subsection to read as follows:

**305.4 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.

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Change subsection to read as follows:

**305.4.1 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 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 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.

# **SECTION 607 HOT WATER SUPPLY SYSTEMS**

Add new subsection to read as follows:

**607.1.3 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

Change subsection to read as follows:

**608.14 Portsmouth Water Department backflow prevention criteria.** Backflow prevention at the water meter shall be accordance with Section 608.14.1 through 608.14.1.6, 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 SANITARY DRAINAGE

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:

**705.11.2 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 912 WET VENTING**

Amend Table 912.3 as follows:

**Table 912.3 Wet Vent Sizing.** <u>Delete</u> 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

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

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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 as listed in Section 1003.3.4.

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.

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# 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**

Chapter 16
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

608.14 608.16.5

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

#### APPENDIX B – RATES OF RAINFALL FOR VARIOUS CITIES

*Appendix B is adopted as part of this ordinance without 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.

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