

**WASHINGTON STATE  
BUILDING CODE**

**CHAPTERS 51-56 and 51-57 WAC**

**UNIFORM PLUMBING CODE  
and  
UNIFORM PLUMBING CODE STANDARDS**

**2003 Edition**



**Washington State Building Code Council**

**Effective July 1, 2004**

Copies of the State Building Codes may be obtained from:

Washington Association of Building Officials  
Post Office Box 7310  
Olympia, Washington 98507-7310  
(360) 586-6725    [www.wabo/order\\_bo.html](http://www.wabo/order_bo.html)

Complete copies of the 2003 Uniform Plumbing Code as published by the  
International Association of Plumbing and Mechanical Officials  
may be obtained from:

International Association of Plumbing and Mechanical Officials  
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Ontario, CA 91761  
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**Second Edition Titled  
Uniform Plumbing Code  
Chapters 51-56/51-57 WAC  
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**Second Edition based on  
WSR 04-01-110**

## *Preface*

**Authority:** The Uniform Plumbing Code (Chapters 51-56 and 51-77 WAC) is adopted by the Washington State Building Code Council pursuant to Chapters 19.27 and 70.92 RCW. This code was first adopted by reference by the Washington State Legislature in 1974. In 1985, the Legislature delegated the responsibility of adoption and amendment of these codes to the State Building Code Council.

**Supersession of Previous Codes:** Chapters 51-56 and 51-57 WAC supersede Chapters 51-46 and 51-47 WAC.

**Code Precedence:** The State Building Code Act, Chapter 19.27 RCW, establishes the following order of precedence among the documents adopted as parts of the State Building Code:

International Building Code, Standards and amendments – WAC 51-50;  
International Residential Code, Standards and amendments – WAC 51-51;  
International Mechanical Code, Standards and amendments – WAC 51-52;  
International Fire Code, Standards and amendments – WAC 51-54;  
Uniform Plumbing Code, Standards and amendments – WAC 51-56, 51-57.

Where there is a conflict between codes, an earlier named code takes precedence over a later named code. In the case of conflict between the duct insulation requirements of the International Mechanical Code and the duct insulation requirements of the Energy Code, the Energy Code, or where applicable, a local jurisdiction's energy code, shall govern.

Where, in any specific case, different sections of this Code specify different materials, methods of construction or other requirements, the most restrictive shall govern. Where there is conflict between a general requirement and a specific requirement, the specific requirement shall be applicable.

**Organization and Numbering:** These rules are written to allow compatible use with the Uniform Plumbing Code. All sections which are amended, deleted, or added are referenced.

**Enforcement:** The State Building Code Act requires that each local jurisdiction enforce the State Building Code within its jurisdiction. Any jurisdiction can contract with another jurisdiction or an inspection agency to provide the mandated enforcement activities.

### **Amendments to the State Building Code:**

The State Building Code Council has adopted review procedures and approval criteria for local amendments. These procedures and criteria are found in Chapter 51-04 WAC. The Council has exempted from its review any amendments to the administrative provisions of the various codes.

Forms for proposing statewide amendments to the State Building Code are available from the State Building Code Council staff.

- A. **Amendments of Statewide Application:** On a yearly basis the State Building Code Council will consider proposals to amend the State Building Code. The Council is not scheduled to enter formal rulemaking until 2006 as part of its consideration of adoption of the 2006 series of codes.

Proposals to amend the State Building Code shall be made on forms provided by the Building Code Council.

Code Change Proposal Submittal Deadline: March 1st of each year.

B. **Local Amendments:** Any jurisdiction may amend the State Building Code provided the amendments do not reduce the minimum performance standards of the codes. There are two areas where local amendments are limited or prohibited:

**Prohibited Amendments:** Residential provisions of the State Energy Code (WAC 51-11), the Ventilation and Indoor Air Quality Code (WAC 51-13); any provision of the International Building Code or International Residential Code affecting accessibility; and standards specifically adopted in Chapters 19.27 and 19.27A WAC cannot be amended by any local jurisdiction.

**Residential Amendments:** Amendments by local jurisdictions which affect the construction of single family and multi-family residential buildings must be reviewed and approved by the State Building Code Council before such amendments can be enforced. The State Building Code Act provides the following definition:

Multi-family residential building: means common wall residential buildings that consist of four or fewer units, that do not exceed two stories in height, that are less than 5,000 square feet in area, and that have a one-hour fire-resistive occupancy separation between units.

Application forms for Council review of local amendments are available from the State Building Code Council Staff.

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**Printing Format:** This version of the rules is published as a series of insert or replacement pages. Each page provides instructions for installing them in the model code book. Amendments to the model code which are new or revised from the previous edition of this code are indicated by a line in the margin next to the revised portions.

**Effective Date:** These rules were adopted by the State Building Code Council on November 21, 2003. The rules are effective throughout the state on July 1, 2004. (This version of the code is based on WAC 51-56 and 51-57 as published in WSR 04-01-110. It is subject to review by the State Legislature during the 2004 session.)

**Building Permit Fees:** The activities of the State Building Code Council are supported by permit fees collected by each city and county. Section 19.27.085 of the State Building Code Act requires that a fee of \$4.50 be imposed on each building permit issued by each city and county. In addition, a fee of \$2.00 per unit shall be imposed for each dwelling unit after the first unit, on each building containing more than one residential unit. For the purpose of this fee, WAC 365-110-035 defines building permits as any permit to construct, enlarge, alter, repair, move, improve, remove, convert or demolish any building or structure regulated by the Building Code. Exempt from the fee are plumbing, electrical, mechanical permits, permits issued to install a mobile/manufactured home, commercial coach or factory built structure, or permits issued pursuant to the International Fire Code.

Each city and county shall remit moneys collected to the state treasury quarterly. No remittance is required until a minimum of \$50.00 has accumulated.

**These permit fees are the amounts current in January 2004. Such fees may be changed by the State Legislature.**

**Opinions:** Only at the request of local enforcement officials, the State Building Code Council may issue interpretations/opinions of those provisions of the State Building Code created by the Council, or provisions of the model codes amended by the Council. Final interpretation authority for any specific permit resides with the local enforcement official.

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**CHAPTER 51-56 WAC  
STATE BUILDING CODE ADOPTION AND AMENDMENT  
OF THE 2003 EDITION OF THE UNIFORM PLUMBING CODE**

**WAC 51-56-001 AUTHORITY.**

These rules are adopted under the authority of Chapter 19.27 RCW.

**WAC 51-56-002 PURPOSE.**

The purpose of these rules is to implement the provisions of Chapter 19.27 RCW, which provides that the State Building Code Council shall maintain the State Building Code in a status which is consistent with the purpose as set forth in RCW 19.27.020. In maintaining the codes, the council shall regularly review updated versions of the codes adopted under the act, and other pertinent information, and shall amend the codes as deemed appropriate by the Council.

**WAC 51-56-003 UNIFORM PLUMBING CODE.**

The 2003 edition of the Uniform Plumbing Code, published by the International Association of Plumbing and Mechanical Officials, is hereby adopted by reference with the following additions, deletions and exceptions:  
⇒ PROVIDED that Chapters 12, and 15 of this code are not adopted. PROVIDED FURTHER, that those requirements of the Uniform Plumbing Code relating to venting and combustion air of fuel fired appliances as found in Chapter 5 and those portions of the Code addressing building sewers are not adopted.

**WAC 51-56-007 EXCEPTIONS.**

The exceptions and amendments to the model codes contained in the provisions of Chapter 19.27 RCW shall apply in cases of conflict with any of the provisions of these rules.

Codes referenced which are not adopted through RCW 19.27.031 or Chapter 19.27A RCW shall not apply unless specifically adopted by the authority having jurisdiction.

**WAC 51-56-008 IMPLEMENTATION.**

The Uniform Plumbing Code adopted by Chapter 51-56 WAC shall become effective in all counties and cities of this state on July 1, 2004, unless local government residential amendments have been approved by the State Building Code Council.





**101.4.1.4 Conflicts Between Codes.** Delete paragraph.



**103.1.3 Certification.** State rules and regulations concerning certification shall apply.

**102.4 Appeals.** All persons shall have the right to appeal a decision of the Authority Having Jurisdiction. The jurisdiction shall have a board of appeals to hear and rule on Plumbing Code appeals. Members of the board shall be appointed by the jurisdiction. Decisions by the board shall be reported to the jurisdiction and administered by the Authority Having Jurisdiction.

(Insert Facing Page 3)

**Certified Backflow Assembly Tester** – A person certified by the Washington State Department of Health under Chapter 246-292 WAC to inspect (for correct installation and approval status) and test (for proper operation) approved backflow assemblies.



**Plumbing System** – Includes all potable water building supply and distribution pipes, all plumbing fixtures and traps, all drainage and vent pipe(s), and all building drains including their respective joints and connection, devices, receptors, and appurtenances within the property lines of the premises and shall include potable water piping, potable water treating or using equipment, medical gas and medical vacuum systems, and water heaters: *Provided*, that no certification shall be required for the installation of a plumbing system within the property lines and outside a building.





**301.1.3 Standards.** Standards listed or referred to in this chapter or other chapters cover materials which will conform to the requirements of this Code, when used in accordance with the limitations imposed in this or other chapters thereof and their listing. Where a standard covers materials of various grades, weights, quality, or configurations, there may be only a portion of the listed standard which is applicable. Design and materials for special conditions or materials not provided for herein are allowed to be used by special permission of the Authority Having Jurisdiction after the Authority Having Jurisdiction has been satisfied as to their adequacy in accordance with Section 301.2.



**311.4** Except as hereinafter provided in Sections 908.0, 909.0, 910.0, and Appendix L, Section L 6.0, no vent pipe shall be used as a soil or waste pipe, nor shall any soil or waste pipe be used as a vent.

**313.6** No water, soil, or waste pipe shall be installed or permitted outside of a building or in an exterior wall unless, where necessary, adequate provision is made to protect such pipe from freezing. All hot and cold water pipes installed outside the conditioned space shall be insulated to a minimum R-3.

(Insert Facing Page 21)

**313.7** All pipes penetrating floor/ceiling assemblies and fire-resistance rated walls or partitions shall be protected in accordance with the requirements of the building code.

**314.5.1** In Seismic Design Categories C, D, E and F hubless cast iron piping in sizes 5 inches and larger suspended in exposed locations over public or high traffic areas, pipe over 4 feet in length shall be provided with support on both sides of the coupling.





**402.0 Water-Conserving Fixtures and Fittings.**

**402.1** The purpose of this Section shall be to implement water conservation performance standards in accordance with RCW 19.27.170.

**402.2 Application.** This Section shall apply to all new construction and all remodeling involving replacement of plumbing fixtures and fittings in all residential, hotel, motel, school, industrial, commercial use, or other occupancies determined by the council to use significant quantities of water. Plumbing fixtures, fittings and appurtenances shall conform to the standards specified in this Section and shall be provided with an adequate supply of potable water to flush and keep the fixtures in a clean and sanitary condition without danger of backflow or cross-connection.

**402.3 Water Efficiency Standards.**

**402.3.1 Standards for Vitreous China Plumbing Fixtures.**

**402.3.1.1** The following standards shall be adopted as plumbing materials, performance standards, and labeling standards for water closets and urinals. Water closets and urinals shall meet either the ANSI/ASME standards or the CSA standard.

ANSI/ASME A112.19.2M-1998	Vitreous China Plumbing Fixtures
ANSI/ASME A112.19.6-1995	Hydraulic Requirements for Water Closets and Urinals
CSA B45	CSA Standards on Plumbing Fixtures

**402.3.1.2** The maximum water use allowed in gallons per flush (gpf) or liters per flush (lpf) for any of the following water closets shall be the following:

Tank-type toilets	1.6 gpf/6.0 lpf
Flushometer-valve toilets	1.6 gpf/6.0 lpf
Flushometer-tank toilets	1.6 gpf/6.0 lpf
Electromechanical hydraulic toilets	1.6 gpf/6.0 lpf

- Exceptions:**
1. Water closets located in day care centers, intended for use by young children may have a maximum water use of 3.5 gallons per flush or 13.25 liters per flush.
  2. Water closets with bed pan washers may have a maximum water use of 3.5 gallons per flush or 13.25 liters per flush.
  3. Blow out bowls, as defined in ANSI/ASME A112.19.2M, Section 5.1.2.3 may have a maximum water use of 3.5 gallons per flush or 13.25 liters per flush.

**402.3.1.3** The maximum water use allowed for any urinal shall be 1.0 gallons per flush or 3.78 liters per flush.

**402.3.1.4** No urinal or water closet that operates on a continuous flow or continuous flush basis shall be permitted.

**402.3.1.5** This section does not apply to fixtures installed before the effective date of this Section, that are removed and relocated to another room or area of the same building after the effective date of this Section.

**402.3.2 Standards for Plumbing Fixture Fittings.**

**402.3.2.1** The following standards are adopted as plumbing material, performance requirements, and labeling standards for plumbing fixture fittings. Faucets, aerators, and shower heads shall meet either the ANSI/ASME standard or the CSA standard.

ANSI/ASME A112.18.1M-1996	Plumbing Fixture Fittings
CSA B125	Plumbing Fittings

**402.3.2.2** The maximum water use allowed for any shower head is 2.5 gallons per minute or 9.5 liters per minute.

**Exception:** Emergency use showers shall be exempt from the maximum water usage rates.

**402.3.2.3** The maximum water use allowed in gallons per minute (gpm) or liters per minute (lpm) for any of the following faucets and replacement aerators is the following:

Lavatory faucets	2.5 gpm/9.5 lpm
Kitchen faucets	2.5 gpm/9.5 lpm
Replacement aerators	2.5 gpm/9.5 lpm
Public lavatory faucets other than metering	0.5 gpm/1.9 lpm

**402.4 Metering Valves.** Lavatory faucets located in restrooms intended for use by the general public shall be equipped with a metering valve designed to close by spring or water pressure when left unattended (self-closing).

- Exceptions:**
1. Where designed and installed for use by persons with a disability.
  2. Where installed in day care centers, for use primarily by children under 6 years of age.

**402.5 Implementation.**

**402.5.1** The standards for water efficiency and labeling contained within Section 402.3 shall be in effect as of July 1, 1993, as provided in RCW 19.27.170 and amended July 1, 1998.

**402.5.2** No individual, public or private corporation, firm, political subdivision, government agency, or other legal entity, may, for purposes of use in the state of Washington, distribute, sell, offer for sale, import, install, or approve for installation any plumbing fixtures or fittings unless the fixtures or fittings meet the standards as provided for in this Section.

**Section 402.6 is not adopted.**



**412.2 Location of Floor Drains.** Floor drains shall be installed in the following areas:

**412.2.1** Toilet rooms containing two (2) or more water closets or a combination of one (1) water closet and one (1) urinal, except in a dwelling unit. The floor shall slope toward the floor drains.

**412.2.2** Laundry rooms in commercial buildings and common laundry facilities in multi-family dwelling buildings.



**413.0 Minimum Number of Required Fixtures.** For minimum number of plumbing fixtures required, see Building Code Chapter 29 and Table 2902.1.

**Sections 413.1 through 413.7 and Table 4-1 are not adopted.**



**501.0 General.** The regulations of this chapter shall govern the construction, location, and installation of fuel burning and other water heaters heating potable water. The minimum capacity for water heaters shall be in accordance with the first hour rating listed in Table 5-1. See the Mechanical Code for combustion air and installation of all vents and their connectors. All design, construction, and workmanship shall be in conformity with accepted engineering practices, manufacturer's installation instructions, and applicable standards and shall be of such character as to secure the results sought to be obtained by this Code. No water heater shall be hereinafter installed which does not comply in all respects with the type and model of each size thereof approved by the Authority Having Jurisdiction. A list of accepted gas equipment standards is included in Table 14-1.

**502.5 Chimney, Metal** – Delete definition

**502.7 Direct Vent Appliance** – Delete definition

**502.8 Flue Collar** – Delete definition

**502.9 Gas Vent, Type B** – Delete definition

**502.10 Gas Vent, Type L** – Delete definition

**502.11 Vent** – Delete definition

**502.12 Vent Connector** – Delete definition

**502.13 Venting System** – Delete definition

**502.0 Definitions**

**502.2 Chimney** – Delete definition

**502.3 Chimney, Factory-Built** – Delete definition

**502.4 Chimney, Masonry** – Delete definition

**TABLE 5-1<sup>1,3</sup>**

Number of Bathrooms	1 to 1.5			2 to 2.5				3 to 3.5			
	1	2	3	2	3	4	5	3	4	5	6
Number of Bedrooms											
First Hour Rating <sup>2</sup> , Gallons	42	54	54	54	67	67	80	67	80	80	80

**Notes:**

<sup>1</sup>The first hour rating is found on the "Energy Guide" label.

<sup>2</sup>Non-storage and solar water heaters shall be sized to meet the appropriate first hour rating as shown in the table.

<sup>3</sup>For replacement water heaters, see Section 101.4.1.1.1.





**504.1 Inspection of Chimneys and Vents.** Delete Paragraph.

**505.1 Prohibited Locations.** Water heaters which depend on the combustion of fuel for heat shall not be installed in a room used or designed to be used for sleeping purposes, bathroom, clothes closets or in a closet or other confined space opening into a bath or bedroom.

**Exception:** 1. Direct vent water heaters.

2. Water heaters installed in a closet that has a weather-stripped solid door with an approved door closing device, and designed exclusively for the water heater and where all air for combustion and ventilation is supplied from the outdoors.

3. Water heaters of the automatic storage type installed as a replacement in a bathroom, when specifically approved, properly vented and supplied with adequate combustion air.

Where not prohibited by other regulations, water heaters may be located under a stairway or landing.

**506.2** All storage-type water heaters deriving heat from fuels or types of energy other than gas, shall be provided with, in addition to the primary temperature controls, an over-temperature safety protection device constructed, listed, and installed in accordance with nationally recognized applicable standards for such devices and a combination temperature and pressure relief valve.

**507.0 Combustion Air.** For issues relating to combustion air, see the Mechanical Code.

**Delete remainder of Section 507.**



**509.0 Access and Working Space.**

**509.1** Every water heater installation shall be accessible for inspection, repair, or replacement. The appliance space shall be provided with an opening or doorway of sufficient size to remove the water heater. In no case shall such opening or doorway be less than 24 inches in width. Such access shall be continuous and shall be one or any combination of the following means:

(1) By an opening or door, and passageway not less than 2 feet in width and large enough to permit removal of the water heater, but not less than 30 inches in height. Stairways and ramps leading to or part of such passageways shall comply with the Building Code.

(2) Every attic, roof, mezzanine, or platform more than 8 feet above the ground or floor level shall be made accessible by a stairway or ladder permanently fastened to the building. Such a ladder or stairway shall not be more than 18 feet in length between landings and not less than 14 inches in width. Such a ladder shall have rungs spaced not more than 14 inches center to center and not less than 6 inches from the face of the wall. Each stile is to extend 30 inches above the surface to be reached, or as high as possible, if height is limited. Permanent ladders for water heater access need not be provided at parapets or walls less than 30 inches in height.

**Exception:** A portable ladder may be used for access for water heaters in attics on the single story portion of a Group R or U Occupancy.

(3) By a trap door or opening and passageway not less than 30 inches by 30 inches, but in no case smaller than the water heater. The passageway shall be continuous from the trap door or opening to the water heater. The trap door or opening shall be located not more than 20 feet from the water heater.

(4) Every passageway to an attic water heater shall have an unobstructed solid continuous flooring not less than 24 inches wide from the trap door or opening to the water heater. If the trap door or opening is more than 8 feet above the floor, a stairway or ladder permanently fastened to the building shall be provided. Such stairway or ladder shall lead directly to the edge of the trap door or opening and shall comply with the provisions of this section.

**Exception:** A portable ladder may be used for access for water heaters in attics on the single story portion of a Group R or U Occupancy.

(5) By an unobstructed catwalk not less than 24 inches wide. Access to the catwalk shall be by ladder or stairs complying with the provisions of this section.

**509.2** Attic and underfloor water heater locations shall be provided with an electric outlet and lighting fixture at or near the water heater. The lighting fixture shall be controlled by a switch located adjacent to the opening or trap door.

(Insert Facing Page 44)

**509.3** An unobstructed solidly floored working surface not less than 30 inches in depth and width shall be provided immediately in front of the firebox access opening. A door opening into such space shall not be considered an obstruction.

Sections 509.3.1 through 509.3.4 are not adopted.

Sections 510.1 through 511.2.25 are not adopted.



**512.0 Direct Vent Equipment.** Delete entire Section.

**The remainder of Chapter 5 is not adopted**

**603.0 Cross-Connection Control.** Cross-connection control shall be provided in accordance with the provisions of this chapter. Devices or assemblies for protection of the public water system must be models approved by the Department of Health under WAC 246-290-490. The Authority Having Jurisdiction shall coordinate with the local water purveyor where applicable in all matters concerning cross-connection control within the property lines of the premises.

No person shall install any water operated equipment or mechanism, or use any water treating chemical or substance, if it is found that such equipment, mechanism, chemical or substance may cause pollution or contamination of the domestic water supply. Such equipment or mechanism may be permitted only when equipped with an approved backflow prevention device or assembly.



**603.3.3** For devices and assemblies other than those regulated by the Washington Department of Health in conjunction with the local water purveyor for the protection of public water systems, the Authority Having Jurisdiction shall ensure that the premise owner or responsible person shall have the backflow prevention assembly tested by a Washington State Department of Health certified backflow assembly tester:

1. At the time of installation, repair, or relocation; and
2. At least on an annual schedule thereafter, unless more frequent testing is required by the Authority Having Jurisdiction.

**603.4.6.1** Potable water supplies to systems having no pumps or connections for pumping equipment, and no chemical injection or provisions for chemical injection, shall be protected from backflow by one of the following devices:

1. Atmospheric vacuum breaker
2. Pressure vacuum breaker
3. Reduced pressure backflow preventer
4. A double check valve may be allowed when approved by the water purveyor and the Authority Having Jurisdiction.
5. A spill proof pressure vacuum breaker may be allowed when approved by the water purveyor and the Authority Having Jurisdiction.

**603.4.11** Potable water make up connections to steam or hot water boilers shall be protected by an air gap or reduced pressure principle backflow preventer.

**603.4.13** Potable Water Supply to Carbonators shall be protected by a listed reduced pressure principle backflow preventer as approved by the Authority Having Jurisdiction for the specific use.

**603.4.18.1** Except as provided under Sections 603.4.18.2 and 603.4.18.3, potable water supplies to fire protection systems that are normally under pressure, including but not limited to standpipes and automatic sprinkler systems, except in one or two family residential flow-through or combination sprinkler systems piped in materials approved for potable water distribution systems, shall be protected from back-pressure and back-siphonage by one of the following testable devices:

1. Double check valve assembly
2. Double check detector assembly
3. Reduced pressure backflow preventer
4. Reduced pressure detector assembly

Potable water supplies to fire protection systems that are not normally under pressure shall be protected from backflow and shall meet the requirements of the appropriate standard(s) referenced in Table 14-1.

#### **604.0 Materials.**

**604.1** Water distribution pipe, building supply water pipe and fittings shall be of brass, copper, cast iron, CPVC, galvanized malleable iron, galvanized wrought iron, galvanized steel, PEX or other approved materials. Except as provided in Section 604.14, asbestos-cement, PE, PVC, PEX-AL-PEX or PE-AL-PE water pipe manufactured to recognized standards may be used for cold water building supply distribution systems outside a building. PEX-AL-PEX water pipe, tubing, and fittings, manufactured to recognized standards may be used for hot and cold water distribution systems within a building. Other products not listed in this section are acceptable for their intended use, provided that such materials or distribution systems are listed and approved in accordance with nationally recognized standards. All materials used in the water supply system, except valves and similar devices shall be of like material, except where otherwise approved by the Authority Having Jurisdiction.

**604.14** Plastic water piping may terminate within a building, provided the connection to the potable water distribution system shall be made as near as is practical to the point of entry and shall be accessible. Barbed insert fittings with hose clamps are prohibited within the building.



**608.5** Relief valves located inside a building shall be provided with a drain, not smaller than the relief valve outlet, of galvanized steel, hard drawn copper piping and fittings, CPVC, or listed relief valve drain tube with fittings which will not reduce the internal bore of the pipe or tubing (straight lengths as opposed to coils) and shall extend from the valve to the outside of the building with the end of the pipe not more than two (2) feet (610 mm) nor less than six (6) inches (152 mm) above the ground or the flood level of the area receiving the discharge and pointing downward. Such drains may terminate at other approved locations. No part of such drain pipe shall be trapped and the terminal end of the drain pipe shall not be threaded.

**Exception:** Replacement water heating equipment shall only be required to provide a drain pointing downward from the relief valve to extend between two feet (610 mm) and six inches (152 mm) from the floor. No additional floor drain need be provided.



**609.10.2 Mechanical Devices.** When listed mechanical devices are used, the manufacturer's specifications as to location and method of installation shall be followed.

**610.4** Systems within the range of Table 6-5 may be sized from that table or by the method set forth in Section 610.5.

Listed parallel water distribution systems shall be installed in accordance with their listing.



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**701.1.2** ABS and PVC DWV piping installations shall be installed in accordance with IS 5 and IS 9. Except for individual single family dwelling units, materials exposed within ducts or plenums shall have a flame-spread index of not more than 25 and a smoke-developed index of not more than 50, when tested in accordance with the Test for Surface-Burning Characteristics of the Building Materials (see the Building Code standards based on ASTM E-84 and ANSI/UL 723).



**704.3** Delete paragraph.

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**710.3** The minimum size of any pump or any discharge pipe from a sump having a water closet connected thereto shall be not less than two (2) inches (52 mm).

**Sections 710.3.1 through 710.3.3 are not adopted.**



**PART II — BUILDING SEWERS**

**Part II Building Sewers.** Delete all of Part II, Sections 713 to 723, and Tables 7-7 and 7-8.



**810.4 Strainers.** Every indirect waste interceptor receiving discharge containing particles that would clog the receptor drain shall have a readily removable dome strainer.



**903.1.2** ABS and PVC DWV piping installations shall be installed in accordance with IS 5 and IS 9. Except for individual single family dwelling units, materials exposed within ducts or plenums shall have a flame-spread index of not more than 25 and a smoke developed index of not more than 50, when tested in accordance with the Test for Surface-Burning Characteristics of the Building Materials (See the Building Code standards based on ASTM E-84 and ANSI/UL 723).

(Insert Facing Page 123)



(Insert Facing Page 133)

**1101.3 Material Uses.** Rainwater piping placed within the interior of a building or run within a vent or shaft shall be of cast iron, galvanized steel, wrought iron, brass, copper, lead, Schedule 40 ABS DWV, Schedule 40 PVC DWV, or other approved materials, and changes in direction shall conform to the requirements of Section 706.0.

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**1101.12.0 Cleanouts.**

**1101.12.1** Cleanouts for building storm drains shall comply with the requirements of this Section. Rain leaders and conductors connected to a building storm sewer shall have a cleanout installed at the base of the outside leader or outside conductor before it connects to the horizontal drain. Cleanouts shall be placed inside the building near the connection between the building drain and the building sewer or installed outside the building at the lower end of the building drain and extended to grade.

**(Insert Facing Page 134)**

**1101.12.2** Each cleanout shall be installed so that it opens to allow cleaning in the direction of flow of the soil or waste or at right angles thereto, and except in the case of wye branch and end-of-line cleanouts, shall be installed vertically above the flow line of the pipe.

**1101.12.3** Cleanouts installed under concrete or asphalt paving shall be made accessible by yard boxes, or extending flush with paving with approved materials and be adequately protected.

**1101.12.4** Approved manholes may be installed in lieu of cleanouts when first approved by the Authority Having Jurisdiction. The maximum distance between manholes shall not exceed three hundred (300) feet (91.4 m).

The inlet and outlet connections shall be made by the use of a flexible compression joint no closer than twelve (12) inches (305 mm) to, and not farther than three (3) feet (914 mm) from the manhole. No flexible compression joints shall be embedded in the manhole base.



**1108.0 Controlled-Flow Roof Drainage.** This section is not adopted.

**1309.1** The provisions herein shall apply to the design, installation, testing and verification of medical gas, medical vacuum systems, and related permanent equipment in hospitals, clinics, and other health care facilities.

**1309.2** The purpose of this chapter is to provide minimum requirements for the design, installation, testing and verification of medical gas, medical vacuum systems, and related permanent equipment, from the central supply system to the station outlets or inlets.





**1313.3 Minimum Station Outlets/Inlets.** Station outlets and inlets for medical gas and medical vacuum systems shall be provided as listed in WAC 246-320-525.

**1331.0 System Verification.**

**1331.1** Prior to any medical gas system being placed in service, each and every system shall be verified as described in Section 1331.2.

**1331.1.1** Verification tests shall be performed only after all tests required in Section 1329.0, Installer Performed Tests, have been completed.

Testing shall be conducted by a party technically competent and experienced in the field of medical gas and vacuum pipeline testing and meeting the requirements of ANSI/ASSE Standard 6030, Medical Gas Verifiers Professional Qualifications Standard.

Testing shall be performed by a party other than the installing contractor or material vendor.

When systems have been installed by in-house personnel, testing shall be permitted by personnel of that organization who meet the requirements of this section.

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## **CHAPTER 14 REFERENCED STANDARDS**

**Table 14-1  
Standards for Materials, Equipment, Joints and Connections**  
**Where more than one standard has been listed for the same material or method,  
the relevant portions of all such standards shall apply.**

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**(Remainder of page remains as printed)**



Standard Number	Standard Title	Application
WAC 246-290-490	Washington State Department of Health Cross Connection Control Requirements	Backflow Protection

**WAC 51-57**  
**State Building Code Amendment and Adoption**  
**of Appendix A, B and Appendix I of the 2003 Edition**  
**of the Uniform Plumbing Code**

**WAC 51-57-001 AUTHORITY.**

These rules are adopted under the authority of Chapter 19.27 RCW.

**WAC 51-57-002 PURPOSE.**

The purpose of these rules is to implement the provisions of Chapter 19.27 RCW, which provides that the State Building Code Council shall maintain the State Building Code in a status which is consistent with the purpose as set forth in RCW 19.27.020. In maintaining the codes, the Council shall regularly review updated versions of the codes adopted under the act, and other pertinent information, and shall amend the codes as deemed appropriate by the Council.

**WAC 51-57-003 UNIFORM PLUMBING CODE STANDARDS.**

The 2003 Edition of the Uniform Plumbing Code Standards (Appendixes A, B and I), published by the International Association of Plumbing and Mechanical Officials is hereby adopted by reference.

**WAC 51-57-007 EXCEPTIONS.**

The exceptions and amendments to the model codes contained in the provisions of Chapter 19.27 RCW shall apply in cases of conflict with any of the provisions of these rules.

**WAC 51-57-008 IMPLEMENTATION.**

The Uniform Plumbing Code Standards adopted by Chapter 19.27 RCW shall become effective in all counties and cities of this state on July 1, 2004, unless local government residential amendments have been approved by the State Building Code Council.



**604.1 Location.** Polyethylene piping may terminate within a building or structure. The connection to the potable water distribution system shall be accessible, except that it may be buried underground outside of the building or structure in an accessible location. Barbed insert fittings with hose clamps are prohibited within a building.

(Insert Facing Page 326)





**604.1 Location.** PVC piping may terminate within a building or structure. The connection to the potable water distribution system shall be accessible, except that it may be buried underground outside of the building or structure in an accessible location.



**301.1.1 Materials.** Materials shall comply with the following:

Materials	ASTM Std
Raw Material-CPVC 23447-B	D1784-95
IPS pipe Sch 40 (½ in., ¾ in., and 1 in.) Sch 80 (½ in. – 2 in.)	F 441-89 <sup>e1</sup> F 441-94
Tubing SDR 11 (½ in. – 2 in.)	D2846-93
Fittings Sch 40 (½ in., ¾ in., and 1 in.) Sch 80 (½ in. – 2 in.) Tube Fittings (½ in. – 2 in.)	F 438-93 F 439-93a D 2846-93

**Primer.** Listed primers shall be used that are compatible with the type of listed CPVC cement and pipe used. The primer shall be a true solvent for CPVC, containing no slow drying ingredient. Cleaners shall not be allowed to be used as a substitute or equivalent for a listed primer.

**Exception:** Listed solvent cements that do not require the use of primer shall be permitted for use with CPVC pipe and fittings, manufactured in accordance with ASTM D2845 (½ in. – 2 in.).

**Note:** *Manufacturer shall provide test data from an independent testing laboratory acceptable to the Administrative Authority that their CPVC pipe, together with recommended fittings, has a short term working pressure (STWP) and temperature rating of 150 psi (1030 kPa) at 210 °F (99 °C) for 48 hours or more.*