



RULE-MAKING ORDER
(RCW 34.05.360)

CR-103 (10/1/89)

Agency: State Building Code Council

- Permanent Rule
 Emergency Rule

(1) Date of adoption: November 8, 1991

(2) Purpose:

To adopt by reference and with amendments the 1991 edition of the Uniform Plumbing Code WAC 51-26

(3) Citation of existing rules affected by this order:

- Repealed:
Amended:
Suspended:

(4) Authority for adoption: RCW 19.27.074, RCW 19.27.031

Statute: RCW 19.27

Other Authority:

(5.1) PERMANENT RULE ONLY

Pursuant to notice filed as WSR 91-16-116 on August 7, 1991 (date).

Describe any changes other than editing from proposed to adopted version:

(5.2) EMERGENCY RULE ONLY

Pursuant to RCW 34.05.350 the agency for good cause finds:

- (a) That immediate adoption, amendment, or repeal of a rule is necessary for the preservation of the public health, safety, or general welfare, and that observing the time requirements of notice and opportunity to comment upon adoption of a permanent rule would be contrary to the public interest.
- (b) That state or federal law or federal rule or a federal deadline for state receipt of federal funds requires immediate adoption of a rule.

Reasons for this finding:

(5.3) Any other findings required by other provisions of law as precondition to adoption or effectiveness of rule?

- Yes No If yes, explain:

(6) Effective date of rule:

Permanent Rules

Emergency Rules

- 31 days after filing Immediately
 Other (specify) July 1, 1992 Later (specify) _____

*(If less than 31 days after filing, specific finding in 5.3 under RCW 34.05.380(3) is required)

NAME (TYPE OR PRINT)

Gene J. Colin

SIGNATURE

Chair

DATE
11-8-1991

CODE REVISER USE ONLY

CODE REVISER'S OFFICE
STATE OF WASHINGTON
FILED

DEC 13 1991

TIME 10:35 AM
WSR 92-01-066

Chapter 51-26 WAC

STATE BUILDING CODE ADOPTION AND AMENDMENT OF THE 1991 EDITION OF THE
UNIFORM PLUMBING CODENEW SECTION

WAC 51-26-001 AUTHORITY. These rules are adopted under the authority of chapter 19.27 RCW.

NEW SECTION

WAC 51-26-002 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.

NEW SECTION

WAC 51-26-003 UNIFORM PLUMBING CODE. The 1991 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 11 and 12 of this code are not adopted: PROVIDED FURTHER, That those requirements of the Uniform Plumbing Code relating to venting of appliances as found in Chapter 13 are not adopted.

NEW SECTION

WAC 51-26-004 EXCEPTIONS. The exceptions and amendments to the uniform codes contained in the provisions of chapter 19.27 RCW shall apply in cases of conflict with any of the provisions of these rules.

NEW SECTION

WAC 51-26-008 IMPLEMENTATION. The Uniform Plumbing Code adopted by chapter 51-26 WAC shall become effective in all counties and cities of this state on July 1, 1992, unless local amendments have been approved by the state building code council.

NEW SECTION

WAC 51-26-0300 CHAPTER 3 GENERAL INSTRUCTIONS AND REGULATIONS.

NEW SECTION

WAC 51-26-0310 PROHIBITED FITTINGS AND PRACTICES. Section 310.

(a) No double hub fitting, single or double tee branch, single or double tapped tee branch, side inlet quarter bend, running thread, band, or saddle shall be used as a drainage fitting, except that a double hub sanitary tapped tee may be used on a vertical line as a fixture connection.

(b) No drainage or vent piping shall be drilled and tapped for the purpose of making connections thereto, and no cast iron soil pipe shall be threaded.

(c) No waste connection shall be made to a closet bend or stub of a water closet or similar fixture.

(d) Except as hereinafter provided in Sections 613, 614, and 615, no vent pipe shall be used as a soil or waste pipe, nor shall any soil or waste pipe be used as a vent.

(e) No fitting, fixture and piping connection, appliance, device or method of installation which obstructs or retards the flow of water, wastes, sewage or air in the drainage or venting systems in an amount greater than the normal frictional resistance to flow, shall be used unless it is indicated as acceptable in this Code or is approved by the Administrative Authority as having a desirable and acceptable function and of ultimate benefit to the proper and continuing functioning of the plumbing system. The enlargement of a three (3) inch (76.2 mm) closet bend or stub to four (4) inches (101.6 mm) shall not be considered an obstruction.

(f) Except for necessary valves, where intermembering or mixing of dissimilar metals occur, the point of connection shall be confined to exposed or accessible locations.

(g) All valves, pipes, and fittings shall be installed in correct relationship to the direction of flow.

NEW SECTION

WAC 51-26-0315 PROTECTION OF PIPING, MATERIALS, AND STRUCTURES. Section 315. (a) All piping passing under or through walls shall be protected from breakage. All piping passing through or under cinders or other corrosive materials shall be protected from external corrosion in an approved manner. Approved provisions shall be made for expansion of hot water piping. Voids around piping passing through concrete floors on the ground shall be appropriately sealed.

(b) All piping in connection with a plumbing system shall be so installed that piping or connections will not be subject to undue strains or stresses, and provisions shall be made for expansion, contraction, and structural settlement. No piping shall be directly embedded in concrete or masonry walls or footings. No structural member shall be seriously weakened or impaired by cutting, notching, or otherwise.

(c) All trenches deeper than the footing of any building or structure and paralleling the same must be at least forty-five (45) degrees therefrom, unless permission be otherwise granted by the Administrative Authority.

(d) No building sewer or other drainage piping or part thereof, constructed of materials other than those approved for use under or within a building, shall be installed under or within two (2) feet (.6

m) of any building or structure, or less than one (1) foot (.3 m) below the surface of the ground.

(e) Piping subject to undue corrosion, erosion, or mechanical damage shall be protected in an approved manner.

(f) 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.

NEW SECTION

WAC 51-26-0400 CHAPTER 4 DRAINAGE SYSTEMS.

NEW SECTION

WAC 51-26-0401 MATERIALS. Section 401. (a) Drainage piping shall be cast iron, galvanized steel, galvanized wrought iron, lead, copper, brass, Schedule 40 ABS DWV, Schedule 40 PVC DWV, extra strength vitrified clay pipe, or other approved materials having a smooth and uniform bore, except that:

(1) No galvanized wrought iron or galvanized steel pipe shall be used underground and shall be kept at least six (6) inches (152.4 mm) above ground.

(2) No vitrified clay pipe or fittings shall be used above ground or where pressurized by a pump or ejector. They shall be kept at least twelve (12) inches (.3 m) below ground.

(b) Drainage fittings shall be of cast iron, malleable iron, lead, brass, copper, ABS, PVC, vitrified clay, or other approved materials having a smooth interior waterway of the same diameter as the piping served and all such fittings shall be compatible with the type of pipe used.

(1) Fittings on screwed pipe shall be of the recessed drainage type. Burred ends shall be reamed to the full bore of the pipe.

(2) The threads of drainage fittings shall be tapped so as to allow one-fourth (1/4) inch per foot (20.9 mm/m) grade.

NEW SECTION

WAC 51-26-0500 CHAPTER 5 VENTS AND VENTING.

NEW SECTION

WAC 51-26-0503 MATERIALS. Section 503. (a) Vent pipe shall be cast iron, galvanized steel, galvanized wrought iron, lead, copper, brass, Schedule 40 ABS DWV, Schedule 40 PVC DWV or other approved materials having a smooth and uniform bore except that:

(1) No galvanized wrought iron or galvanized steel pipe shall be used underground and shall be kept at least six (6) inches above ground.

(b) Vent fittings shall be cast iron, galvanized malleable iron

or galvanized steel, lead, copper, brass, ABS, PVC, or other approved materials, except that no galvanized malleable iron or galvanized steel fittings shall be used underground and shall be kept at least six (6) inches (152.4 mm) above ground.

(c) Changes in direction of vent piping shall be made by the appropriate use of approved fittings and no such pipe shall be strained or bent. Burred ends shall be reamed to the full bore of the pipe.

NEW SECTION

WAC 51-26-1000 CHAPTER 10 WATER DISTRIBUTION.

NEW SECTION

WAC 51-26-1004 MATERIALS. Section 1004. (a) Water pipe and fittings shall be of brass, copper, cast iron, galvanized malleable iron, galvanized wrought iron, galvanized steel, or other approved materials. Asbestos-cement, CPVC, PB, PE, or PVC water pipe manufactured to recognized standards may be used for cold water distribution systems outside a building. CPVC and PB water pipe and tubing may be used for hot and cold water distribution systems within a building. All materials used in the water supply system, except valves and similar devices shall be of a like material, except where otherwise approved by the Administrative Authority.

(b) Cast iron fittings up to and including two (2) inches (50.8 mm) in size, when used in connection with potable water piping shall be galvanized.

(c) All malleable iron water fittings shall be galvanized.

(d) Piping and tubing which has previously been used for any purpose other than for potable water systems shall not be used.

(e) Approved plastic materials may be used in water service piping, provided that where metal water service piping is used for electrical grounding purposes, replacement piping therefore shall be of like materials.

EXCEPTION: Where a grounding system, acceptable to the Administrative Authority is installed, inspected, and approved, metallic pipe may be replaced with non-metallic pipe.

(f) Solder shall conform to the requirements of Section 802(d).

(g) Water pipe and fittings with a lead content which exceeds eight (8) percent shall be prohibited in piping systems used to convey potable water.

NEW SECTION

WAC 51-26-1800 CHAPTER 18 WATER CONSERVATION PERFORMANCE STANDARDS.

NEW SECTION

WAC 51-26-1801 DECLARATION OF PURPOSE. The purpose of this chapter shall be to implement water conservation performance standards in accordance with RCW 19.27.170. Cities, towns, and counties are prohibited from amending the standards established for low water consumption plumbing fixtures contained within this chapter.

NEW SECTION

WAC 51-26-1802 APPLICATION. This chapter shall apply to all new construction and all remodeling involving replacement of plumbing fixtures in all residential, hotel, motel, school, industrial, commercial use, or other occupancies determined by the council to use significant quantities of water.

NEW SECTION

WAC 51-26-1803 WATER EFFICIENCY STANDARDS. (1) Standards for waterclosets. The guideline for maximum water use allowed in gallons per flush (gpf) for any of the following waterclosets is the following:

- Tank-type toilets..... 3.5 gpf
- Flushometer-valve toilets..... 3.5 gpf
- Flushometer-tank toilets..... 3.5 gpf
- Electromechanical hydraulic toilets..... 3.5 gpf

(2) Standard for urinals. The guideline for maximum water use allowed for any urinal is 3.0 gallons per flush.

(3) Standard for showerheads. The guideline for maximum water use allowed for any showerhead is 3.0 gallons per minute.

(4) Standards for faucets. The guideline for maximum water use allowed in gallons per minute (gpm) for any of the following faucets and replacement aerators is the following:

- Bathroom faucets..... 3.0 gpm
- Lavatory faucets..... 3.0 gpm
- Kitchen faucets..... 3.0 gpm
- Replacement aerators..... 3.0 gpm

(5) No urinal or watercloset that operates on a continuous flow or continuous flush basis shall be permitted.

NEW SECTION

WAC 51-26-1804 EXCEPTIONS. Except where designed and installed for use by the physically handicapped, lavatory faucets located in restrooms intended for use by the general public must be equipped with a metering valve designed to close by spring or water pressure when left unattended (self-closing).

NEW SECTION

WAC 51-26-1805 IMPLEMENTATION. The standards for water efficiency contained in WAC 51-18-030 shall be in effect as of July 1, 1990, as provided in RCW 19.27.170.

NEW SECTION

WAC 51-26-2200 CHAPTER 22 MINIMUM PLUMBING FACILITIES.

Each building shall be provided with sanitary facilities, including provisions for the physically handicapped as prescribed by the Department having jurisdiction. In the absence of such requirements, this Appendix--which provides a guideline for the minimum facilities for the various types of occupancies (see Section 910, Plumbing Fixtures Required, of the Uniform Plumbing Code) may be used. For handicapped requirements ANSI A117.1-1961 (R1971), Specifications for Making Buildings and Facilities Accessible to, and Usable by, the Physically Handicapped, may be used.

The number of occupants shall be that determined by minimum exiting requirements.

Type of Building or Occupancy	Water Closets (Fixtures per Person)		Urinals ¹⁰ (Fixtures per Person)	Lavatories (Fixtures per Person)		Bathtubs or Showers (Fixtures per Person)	Drinking Fountains ^{3,13} (Fixtures per Person)
	Male	Female ¹⁴		Male	Female		
Assembly Places-Theaters, Auditoriums, Convention Halls, etc.--for permanent employee use	1:1-15 2:16-35 3:36-55	1:1-15 3:16-35 4:36-55	0:1-9 1:10-50	1 per 40	1 per 40		
	Over 55, add 1 fixture for each additional 40 persons.		Add one fixture for each additional 50 males.				
Assembly Places-Theaters, Auditoriums, Convention Halls, etc.--for public use	1:1-100 2:101-200 3:201-400	3:1-50 4:51-100 8:101-200 11:201-400	1:1-100 2:101-200 3:201-400 4:401-600	1:1-200 2:201-400 3:401-750	1:1-200 2:201-400 3:401-750		1 per 75 ¹²
	Over 400, add one fixture for each additional 500 males and 2 for each 300 females.		Over 600, add 1 fixture for each additional 500 males.	Over 750, add one fixture for each additional 500 persons.			
Dormitories ⁹ School or Labor	1 per 10	1 per 8	1 per 25	1 per 12	1 per 12	1 per 8	1 per 75 ¹²
	Add 1 fixture for each additional 25 males (over 10) and 1 for each additional 20 females (over 8).		Over 150, add 1 fixture for each additional 50 males.	Over 12 add one fixture for each additional 20 males and 1 for each 15 additional females.		For females, add 1 bathtub per 30. Over 150, add 1 per 20.	
Dormitories for staff use	1:1-15 2:16-35 3:36-55	1:1-15 3:16-35 4:36-55	1 per 50	1 per 40	1 per 40	1 per 8	
	Over 55, add 1 fixture for each additional 40 persons.						
Dwellings ⁴ Single Dwelling Multiple Dwelling or Apartment House	1 per dwelling or apartment unit			1 per dwelling or apartment unit		1 per dwelling or apartment unit	

Type of Building or Occupancy	Water Closets (Fixtures per Person)	Urinals ¹⁰ (Fixtures per Person)	Lavatories (Fixtures per Person)	Bathtubs or Showers (Fixtures per Person)	Drinking Fountains ^{3,13} (Fixtures per Person)
Hospital Waiting rooms	1 per room		1 per room		1 per 75 ¹²
Hospital for employee use	Male 1:1-15 Female 1:1-15 2:16-35 3:16-35 3:36-55 4:36-55 Over 55, add 1 fixture for each additional 40 persons.	0:1-9 1:10-50 Add one fixture for each additional 50 males.	Male 1 per 40 Female 1 per 40		
Hospitals Individual Room Ward Room	1 per room 1 per 8 patients		1 per room 1 per 10 patients	1 per room 1 per 20 patients	1 per 75 ¹²
Industrial ⁶ Warehouses Workshops, foundries and similar establishments (for employee use)	Male 1:1-10 Female 1:1-10 2:11-25 2:11-25 3:26-50 3:26-50 4:51-75 4:51-75 5:76-100 5:76-100 Over 100, add 1 fixture for each additional 30 persons		Up to 100, 1 per 10 persons Over 100, 1 per 15 persons ^{7,8}	1 shower for each 15 persons exposed to excessive heat or to skin contamination with poisonous, infectious, or irritating material	1 per 75 ¹²
Institutional- Other than Hospitals or Penal Institutions (on each occupied floor)	Male 1 per 25 Female ¹⁴ 1 per 20	0:1-9 1:10-50 Add one fixture for each additional 50 males.	Male 1 per 10 Female 1 per 10	1 per 8	1 per 75 ¹²
Institutional- Other than Hospitals or Penal Institutions (on each occupied floor) For employee use	Male 1:1-15 Female ¹⁴ 1:1-15 2:16-35 3:16-35 3:36-55 4:36-55 Over 55, add 1 fixture for each additional 40 persons	0:1-9 1:10-50 Add one fixture for each additional 50 males.	Male 1 per 40 Female 1 per 40	1 per 8	1 per 75 ¹²
Office or Public Buildings	Male 1:1-100 Female ¹⁴ 3:1-50 2:101-200 4:51-100 3:201-400 8:101-200 11:201-400 Over 400, add one fixture for each additional 500 males and 2 for each 300 females.	1:1-100 2:101-200 3:201-400 4:401-600 Over 600, add 1 fixture for each additional 300 males.	Male 1:1-200 Female 1:1-200 2:201-400 2:201-400 3:401-750 3:401-750 Over 750, add one fixture fore each additional 500 persons.		1 per 75 ¹²
Office or Public buildings- For employee use	Male 1:1-15 Female ¹⁴ 1:1-15 2:16-35 3:16-35 3:36-55 4:36-55	Over 55, add 1 fixture for each additional 40 persons.	0:1-9 1:10-50	Add one fixture for each additional 50 males.	Male 1 per 40 Female 1 per 40

Type of Building or Occupancy	Water Closets (Fixtures per Person)	Urinals ¹⁰ (Fixtures per Person)	Lavatories (Fixtures per Person)	Bathtubs or Showers (Fixtures per Person)	Drinking Fountains ^{3,13} (Fixtures per Person)
Penal Institutions- For employee use	Male 1:1-15 Female 1:1-15 2:16-35 3:16-35 3:36-55 4:36-55 Over 55, add 1 fixture for each additional 40 persons.	0:1-9 1:10-50 Add one fixture for each additional 50 males.	Male 1 per 40 Female 1 per 40		1 per 75 ¹²
Penal Institutions- For prison use					
Cell	1 per cell		1 per cell		1 per cell block floor
Exercise room	1 per exercise room	1 per exercise room	1 per exercise room		1 per exercise room
Restaurants, Pubs and Lounges ¹¹	Male 1:1-50 Female 1:1-50 2:51-150 2:51-150 3:151-300 4:151-300 Over 300, add 1 fixture for each additional 200 persons	1:1-150 Over 150, add 1 fixture for each additional 150 males	Male 1:1-150 Female 1:1-150 2:151-200 2:151-200 3:201-400 3:201-400 Over 400, add 1 fixture for each additional 400 persons		
Schools-For staff use	Male 1:1-15 Female 1:1-15 2:16-35 2:16-35 3:36-55 3:36-55 Over 55, add 1 fixture for each additional 40 persons	1 per 50	Male 1 per 40 Female 1 per 40		
Schools-For student use					
Nursery	Male 1:1-20 Female 1:1-20 2:21-50 2:21-50 Over 50, add 1 fixture for each additional 50 persons		Male 1:1-25 Female 1:1-25 2:26-50 2:26-50 Over 50, add 1 fixture for each additional 50 persons		1 per 75 ¹²
Elementary	Male 1 per 30 Female 1 per 25	1 per 75	Male 1 per 35 Female 1 per 35		1 per 75 ¹²
Secondary	Male 1 per 40 Female 1 per 30	1 per 35	Male 1 per 40 Female 1 per 40		1 per 75 ¹²
Others (Colleges, Universities, Adult Centers, etc.)	Male 1 per 40 Female 1 per 30	1 per 35	Male 1 per 40 Female 1 per 40		1 per 75 ¹²
Worship Places Educational and Activities Unit	Male 1 per 125 Female ¹⁴ 1 per 75 2:126-250 2:76-125 3:126-250	1 per 125	1 per 2 water closets		1 per 75 ¹²
Worship Places Principal Assembly Place	Male 1 per 150 Female ¹⁴ 1 per 75 2:151-300 2:76-150 3:151-300	1 per 150	1 per 2 water closets		1 per 75 ¹²

Whenever urinals are provided, one (1) water closet less than the number specified may be provided for each urinal installed except the number of water closets in such cases shall not be reduced to less than two-thirds (2/3) of the minimum specified.

1. The figures shown are based upon one (1) fixture being the minimum required for the number of persons indicated or any fraction thereof.
2. Building categories not shown on this table shall be considered separately by the Administrative Authority.
3. Drinking fountains shall not be installed in toilet rooms.
4. Laundry trays. One (1) laundry tray or one (1) automatic washer standpipe for each dwelling unit or two (2) laundry trays or two (2) automatic washer standpipes, or combination thereof, for each ten (10) apartments. Kitchen sinks, one (1) for each dwelling or apartment unit.
5. Deleted.
6. As required by ANSI Z4.1-1968, Sanitation in Places of Employment.
7. Where there is exposure to skin contamination with poisonous, infectious, or irritating materials, provide one (1) lavatory for each five (5) persons.
8. Twenty-four (24) lineal inches (609.6 mm) of wash sink or eighteen (18) inches (457.2 mm) of a circular basin, when provided with water outlets for such space, shall be considered equivalent to one (1) lavatory.
9. Laundry trays, one (1) for each fifty (50) persons. Slop sinks, one (1) for each hundred (100) persons.
10. General. In applying this schedule of facilities, consideration must be given to the accessibility of fixtures. Conformity purely on a numerical basis may not result in an installation suited to the need of the individual establishment. For example, schools should be provided with toilet facilities on each floor having classrooms. Temporary workmen facilities, one (1) water closet and one (1) urinal for each thirty (30) workmen.
 - a. Surrounding materials, wall and floor space to a point two (2) feet (0.6 m) in front of urinal lip and four (4) feet (1.2 m) above the floor, and at least two (2) feet (0.6 m) to each side of the urinal shall be lined with non-absorbent materials.
 - b. Trough urinals are prohibited.
11. A restaurant is defined as a business which sells food to be consumed on the premises.
 - a. The number of occupants for a drive-in restaurant shall be considered as equal to the number of parking stalls.
 - b. Employee toilet facilities are not to be included in the above restaurant requirements. Hand washing facilities must be available in the kitchen for employees.
12. Where food is consumed indoors, water stations may be substituted for drinking fountains. Theatres, auditoriums, dormitories, offices, or public buildings for use by more than six (6) persons shall have one (1) drinking fountain for the first seventy-five (75) persons and one (1) additional fountain for each one hundred and fifty (150) persons thereafter.
13. There shall be a minimum of one (1) drinking fountain per occupied floor in schools, theatres, auditoriums, dormitories, offices or public building.
14. The total number of water closets for females shall be at least equal to the total number of water closets and urinals required for males.

NEW SECTION

WAC 51-26-2300 CHAPTER 23 RAINWATER SYSTEMS.

NEW SECTION

WAC 51-26-2301 D1 MATERIALS. (a) 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.

(b) Rainwater piping located on the exterior of a building shall be not less than 26 ga. galvanized sheet metal. When the conductor is connected to a building storm drain or storm sewer, a drain connection shall be extended above the finished grade and jointed at a point protected from injury.

(c) Rainwater piping located underground within a building shall be of service weight cast iron soil pipe, Type DWV copper tube, Schedule 40 ABS DWV, Schedule 40 PVC DWV, extra strength vitrified clay pipe, or other approved materials.

(d) Rainwater piping commencing two (2) feet (.6 m) from the exterior of a building may be of any approved material permitted in the Installation Requirements of this Code.