



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 18, 1994

(2) Purpose: To amend the 1991 Edition of the Uniform Plumbing Code, as published by the International Association of Plumbing and Mechanical Officials.

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

- Repealed:
Amended: WAC 51-26
Suspended:

(4) Authority for adoption:

- Statute: RCW 19.27
Other Authority:

(5.1) PERMANENT RULE ONLY

Pursuant to notice filed as WSR 94-16-115 on 8/2/94 (date).
Describe any changes other than editing from proposed to adopted version: None

(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 |
| <input type="checkbox"/> 31 days after filing | <input type="checkbox"/> Immediately |
| <input checked="" type="checkbox"/> Other (specify) <u>6/30/95</u> * | <input type="checkbox"/> Later (specify) _____ |
- *(If less than 31 days after filing, specific finding in 5.3 under RCW 34.05.380(3) is required)

CODE REVISER USE ONLY

CODE REVISER'S OFFICE
STATE OF WASHINGTON
FILED

DEC 21 1994

TIME: 11:30
R: 95-01-124

NAME (TYPE OR PRINT)

Gene Colin

SIGNATURE

TITLE

Chair

DATE

12/21/94

NEW SECTION

WAC 51-26-0909 Section 909--Floor drains and shower stalls.

(a) Floor drains shall be considered plumbing fixtures and each such drain shall be provided with an approved type strainer having a waterway equivalent to the area of the tailpiece. Floor drains, floor receptors, and shower drains shall be of an approved type, suitably flanged to provide a watertight joint in the floor.

(b) Shower receptors are plumbing fixtures and shall conform to the general requirements therefore contained in Section 901 of this chapter. Each such shower receptor shall be constructed of vitrified china or earthenware, ceramic tile, porcelain enameled metal, or of such other material as may be acceptable to the Administrative Authority. No shower receptacle shall be installed unless it conforms to acceptable standards as required by Chapter 2 of this Code or until a specification or a prototype or both of such receptor has first been submitted to the Administrative Authority and his approval obtained.

(c) Each shower receptor shall be an approved type and be so constructed as to have a finished dam, curb, or threshold which is at least one (1) inch (25.4 mm) lower than the sides and back of such receptor. In no case shall any dam or threshold be less than two (2) inches (50.8 mm) or more than nine (9) inches (228.6 mm) in depth when measured from the top of the dam or threshold to the top of the drain. The finished floor of the receptor shall slope uniformly from the sides toward the drain not less than one-quarter (1/4) inch per foot (20.9 mm/m), nor more than one-half (1/2) inch per foot (41.8 mm/m). Thresholds shall be of sufficient width to accommodate a minimum 22 inch (558.8 mm) door.

Exception: Special use shower compartments for wheelchair use may eliminate the curb or threshold. The required slope and depth shall be maintained from the door entry to the drain opening. The minimum distance between the door or entry to the drain opening shall be 4 feet (1.2 m).

(d) All shower compartments, regardless of shape, shall have a minimum finished interior of one thousand twenty-four (1024) square inches (0.66 m²) and shall also be capable of encompassing a thirty (30) inch (762 mm) circle. The minimum required area and dimensions shall be measured at a height equal to the top of the threshold and at a point tangent to its centerline. The minimum area and dimensions shall be maintained to a point seventy (70) inches (1778 mm) above the shower drain outlet with no protrusions other than the fixture valve or valves, shower head and safety grab bars or rails.

(e) When the construction of on-site built-up shower receptors is permitted by the Administrative Authority, one of the following means shall be employed:

(1) Shower receptors built directly on the ground:

Shower receptors built directly on the ground shall be watertight and shall be constructed from approved type dense, non-absorbent and non-corrosive materials. Each such receptor shall be

adequately reinforced, shall be provided with an approved flanged floor drain designed to make a watertight joint in the floor, and shall have smooth, impervious, and durable surfaces.

(2) Shower receptors built above ground:

When shower receptors are built above ground the sub-floor and rough side of walls to a height of not less than three (3) inches (76.2 mm) above the top of the finished dam or threshold shall be first lined with sheet lead or copper* or shall be lined with other durable and watertight materials. All lining materials shall be pitched one-quarter (1/4) inch per foot (20.9 mm/m) to weep holes in the subdrain of a smooth and solidly formed sub-base. All such lining materials shall extend upward on the rough jambs of the shower opening to a point no less than three (3) inches (76.2 mm) above the top of the finished dam or threshold and shall extend outward over the top of the rough threshold and be turned over and fastened on the outside face of both the rough threshold and the jambs.

* Lead and copper sub-pans or linings shall be insulated from all conducting substances other than their connecting drain by fifteen (15) pound (6.8 kg) asphalt felt or its equivalent and no lead pan or liner shall be constructed of material weighing less than four (4) pounds per square foot (19.6 kg/m²). Copper pans or liners shall be at least No. 24 B & S Gauge (0.2 inches) (.5 mm). Joints in lead pans or liners shall be burned. Joints in copper pans or liners shall be soldered or brazed.

Non-metallic shower sub-pans or linings may be built-up on the job site of not less than three (3) layers of standard grade fifteen (15) pound (6.8 kg) asphalt impregnated roofing felt. The bottom layer shall be fitted to the formed sub-base and each succeeding layer thoroughly hot mopped to that below. All corners shall be carefully fitted and shall be made strong and watertight by folding or lapping, and each corner shall be reinforced with suitable webbing hot-mopped in place. All folds, laps, and reinforcing webbing shall extend at least four (4) inches (101.6 mm) in all directions from the corner and all webbing shall be of approved type and mesh, producing a tensile strength of not less than fifty (50) pounds per inch (.9 kg/mm) in either direction. Non-metallic shower sub-pans or linings may also consist of multi-layers of other approved equivalent materials suitably reinforced and carefully fitted in place on the job site as elsewhere required in this section.

Linings shall be properly recessed and fastened to approved backing so as not to occupy the space required for the wall covering and shall not be nailed or perforated at any point which may be less than one (1) inch (25.4 mm) above the finished dam or threshold. An approved type sub-drain shall be installed with every shower sub-pan or lining. Each such sub-drain shall be of the type that sets flush with the sub-base and shall be equipped with a clamping ring or other device to make a tight connection between the lining and the drain. The sub-drain shall have weep holes into the waste line.

All shower lining materials shall conform to approved standards acceptable to the Administrative Authority.

(f) Floors of public shower rooms shall have a non-skid surface and shall be drained in such a manner that waste water from one bather will not pass over areas occupied by other bathers. Gutters in public or gang shower rooms shall have rounded corners for easy cleaning and shall be sloped not less than two (2) percent toward drains. Drains in gutters shall be spaced not more than

eight (8) feet (2.4 m) from side walls nor more than sixteen (16) feet (4.9 m) apart.

(g) In the absence of local regulations, showers in all occupancies other than dwelling units served by individual water heaters shall be provided with individual shower control valves of the pressure balance or the thermostatic mixing valve type. Multiple or gang showers may be controlled by a master thermostatic mixing valve in lieu of individually controlled pressure balance or thermostatic mixing valves. Limit stops shall be provided on such valves and shall be adjusted to deliver a maximum 120°F.

NEW SECTION

WAC 51-26-1007 Section 1007--Water pressure, pressure regulators, and pressure relief valves. (a) Inadequate Water Pressure - Whenever the water pressure in the main or other source of supply will not provide a water pressure of at least fifteen (15) pounds per square inch (103.4 kPa), after allowing for friction and other pressure losses, a tank and a pump or other means which will provide said fifteen (15) pounds per square inch (103.4 kPa) pressure shall be installed.

(b) Excessive Water Pressure - Where local water pressure is in excess of eighty (80) pounds per square inch (551.2 kPa), an approved type pressure regulator preceded by an adequate strainer shall be installed and the pressure reduced to eighty (80) pounds per square inch (551.2 kPa) or less. For potable water services up to and including one and one-half (1-1/2) inch (38.1 mm) regulators, provision shall be made to prevent pressure on the building side of the regulator from exceeding main supply pressure. Approved regulators with integral by-passes are acceptable. Each such regulator and strainer shall be accessibly located and shall have the strainer readily accessible for cleaning without removing the regulator or strainer body or disconnecting the supply piping. All pipe size determinations shall be based on eighty (80) percent of the reduced pressure when using Table 10-2.

(c) Any water system provided with a pressure regulating device or check valve at its source or any water system containing storage water heating equipment shall be provided with an approved, listed, adequately sized pressure relief valve, except for listed non-storage instantaneous heaters having an inside diameter of not more than three (3) inches.

In addition to the required pressure relief valve, an approved, listed expansion tank or other device designed for intermittent operation for thermal expansion control shall be installed whenever the building supply pressure is greater than the required relief valve pressure setting or when any device is installed that prevents pressure relief through the building supply. The tank or device shall be sized in accordance with the manufacturer's recommendation.

(d) Each pressure relief valve shall be an approved automatic type with drain, and each such relief valve shall be set at a

pressure of not more than one hundred fifty (150) pounds per square inch (1033.5 kPa).

(e) 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 PB 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 (.6 m) nor less than six (6) inches (152.4 mm) above the ground 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.

(f) Any water heating device connected to a separate storage tank and having valves between said heater and tank shall be provided with an approved water pressure relief valve.

(g) Nothing contained herein shall prevent the use of an approved combination temperature and pressure relief valve. Each such approved combination temperature and pressure relief valve shall be installed on the water heating device in an approved location based on its listing requirements and the manufacturer's instructions. Each such combination temperature and pressure relief valve shall be provided with a drain as required in subsection (e) of this section.

NEW SECTION

WAC 51-26-1009 Section 1009--Size of potable water piping.

(a) The size of each water meter and each potable water supply pipe from the meter or other source of supply to the fixture supply branches, risers, fixtures, connections, outlets, or other uses shall be based on the total demand and shall be determined according to the methods and procedures outlined in this section.

(b) Whenever a water filter, water softener or similar water treating device, backflow prevention device, or similar device is installed in any water supply line, the pressure loss through such devices must be included in the pressure loss calculations of the system, and the water supply pipe and meter shall be adequately sized to provide for any such pressure loss.

No water filter, water softener, backflow prevention device, or similar device regulated by this Code shall be installed in any potable water supply piping when the diameter of the inlet or outlet of any such device or its connecting piping is less than the diameter of such water supply piping, or when the installation of such device produces an excessive pressure drop in any such water supply piping.

All such devices shall be of a type approved by the Administrative Authority and shall be tested for flow rating and pressure loss by an approved laboratory or recognized testing agency to standards consistent with the intent of this chapter.

The maximum rated flow and the pressure loss shall be stamped legibly on the device or on a metal label, permanently attached to the device, and shall be in the following form:

MAXIMUM PRESSURE DROP

Flow Gallons per minute	Liters per second	Pressure Drop Pounds per square inch
5	.32	-- (kPa)
10	.63	-- (kPa)
15	.95	-- (kPa)

NOTE: The final figure in the flow rate column shall be the maximum rated flow or capacity of the device.

(c) The quantity of water required to be supplied to every plumbing fixture shall be represented by fixture units, as shown in Table 10-1. Equivalent fixture values shown in Table 10-1 include both hot and cold water demand.

(d) Where the maximum length of supply piping is two hundred (200) feet (60.8 m) or less, each water piping system of fifty (50) fixture units or less shall be sized in accordance with the values set forth in Table 10-2 of this section. Other systems of more than fifty (50) fixture units and within the range of Table 10-2 may be sized from that table or by the method set forth in subsection (f) of this section.

(e) Listed engineered parallel water distribution systems may be installed in accordance with their listing.

(f) Except as provided in subsection (d) of this section, the size of each water piping system shall be determined in accordance with the procedure set forth in Appendix A of this Code (Recommended Rules for Sizing the Water Supply System).

(g) Except where the type of pipe used and the water characteristics are such that no decrease in capacity due to length of service (age of system) may be expected, all friction loss data shall be obtained from the "Fairly Rough" or "Rough" charts in Appendix A of this Code. Friction or pressure losses in water meter, valve and fittings shall be obtained from the same sources. Pressure losses through water treating equipment, backflow prevention devices, or other flow restricting devices shall be computed as required by subsection (b) of this section.

(h) On any proposed water piping installation sized using Table 10-2, the following conditions shall be determined:

(1) Total number of fixture units as determined from the table of Equivalent Fixture Units (Table 10-1) for the fixtures to be installed.

(2) Developed length of supply pipe from meter to most remote outlet.

(3) Difference in elevation between the meter or other source of supply and the highest fixture or outlet.

(4) Pressure in the street main or other source of supply at the locality where the installation is to be made.

(5) In localities where there is a fluctuation of pressure in the main throughout the day, the water piping systems shall be designed on the basis of the minimum pressure available.

(i) **Size of Meter and Building Supply Pipe Using Table 10-2.** Knowing the available pressure at the water meter or other source of supply, and after subtracting one-half (1/2) pound per square inch pressure for each foot (11.3 kPa/m) of difference in elevation between such source of supply and highest water supply outlet in the building or on the premises, use the "Pressure Range" group within which this pressure will fall. Select the "length" column which is equal to or longer than the required length. Follow down the column to a fixture unit value equal to or greater than the total number of fixture units required by the installation. Having located the proper fixture unit value for the required length, sizes of meter and building supply pipe will be found in the two left-hand columns.

No building supply pipe shall be less than three-quarter (3/4) inch (919.1 mm) in diameter.

(j) **Size of Branches.** The size of each branch shall be determined by the number of fixture units to be served by that branch, following the methods outlined in subsection (i) of this section.

(k) **Sizing for Flushometer Valves.** Branches and mains serving water closet or similar flushometer valves may be sized from Table 10-2 when the following values are assigned to each flushometer valve beginning with the most remote valve on each branch.

For the first flushometer valve	40 fixture units
For the second flushometer valve	30 fixture units
For the third flushometer valve	20 fixture units
For the fourth flushometer valve	15 fixture units
For the fifth flushometer valve	10 fixture units

Flushometer valves with an assigned value of five (5) fixture units given in Table 10-1 may be computed at half (1/2) the above values assigned, but in no case less than five (5) fixture units. After the fifth valve on any branch or main, subsequent fixture unit loading may be computed using the value of the fifth flushometer. Piping supplying a flushometer valve shall not be less in size than the valve inlet.

Note: Any system using flushometer valves may be sized by the procedures set forth in subsection (f) of this section.

(l) **Sizing Systems for Flushometer Tanks.** The size of branches and mains serving flushometer tanks shall be consistent with the sizing procedures for flush tank water closets.

(m) **Sizing Systems With Hot Water Piping.** In sizing a water piping system having a total demand of fifty (50) fixture units or less, the greatest developed length of the cold water supply piping may be used (from Table 10-2) and the length of the hot water piping ignored when the hot water piping friction loss is compensated for by the following method:

(1) Compute the total hot water fixture unit demand, using those values given in Table 10-1 for the combined hot and cold water use.

(2) Assign the total demand computed as required in (1) above, as the fixture unit demand at the hot water heater inlet.

(3) Starting at the most remote outlet on the cold water piping and working back toward the water meter, compute the pipe sizing for the system from the column originally selected in Table 10-2, using the fixture unit values given in Table 10-1, and adding

in the fixture unit demand of the hot water heater supply inlet as computed in (1) above, at the point where it occurs. The final size of the cold water branch or main need not exceed the originally established size of the building supply.

(n) Except as provided in subsection (m), water piping systems may be designed by taking the total length of the supply piping from the source of cold water supply through the water heater, to the most remote hot water outlet and assessing flow values of seventy-five (75) percent of the combined hot and cold water demand as given in Table 10-1, to the piping supplying either hot or cold water to those fixtures served by both. Piping serving water heaters shall be sized to deliver the above required hot water demand, plus all required cold water demands, but in no case need the piping be larger in size than that required by Table 10-2 for the total building supply.

(o) **Exceptions.** The provisions of this section relative to size of water piping need not apply to the following:

(1) Water supply piping systems designed in accordance with recognized engineering procedures acceptable to the Administrative Authority.

(2) Alteration of or minor additions to existing installations, provided the Administrative Authority finds that there will be a reasonably adequate supply of water for all fixtures.

(3) Replacement of existing fixtures or appliances.

(4) Piping which is part of fixture equipment.

(5) Unusual conditions where, in the judgment of the Administrative Authority, a reasonably adequate supply of water is provided.

(6) Non-potable water lines as defined in subsection (r) of Section 1003.

(7) The size and material of irrigation water piping installed outside of any building or structure and separated from the potable water supply by means of an approved airgap or backflow prevention device is not regulated by this Code. The potable water piping system supplying each such irrigation system shall be adequately sized as required elsewhere in this chapter to deliver the full connected demand of both systems.

NEW SECTION

WAC 51-26-1020 Section 1020--Table 10-1.

TABLE 10-1
Equivalent Fixture Units
(Includes Combined Hot and Cold Water Demand)

<u>Fixture</u>	Number of Fixture Units	
	<u>Private</u> <u>Use</u>	<u>Public</u> <u>Use</u>
Bar sink.....	1	2
Bathtub (with or without shower over).....	2	4
Bidet.....	2	4
Dental unit or cuspidor.....	—	1
Drinking fountain (each head).....	1	2
Hose bibb or sill cock (standard type).....	3	5
Mobile home (each).....	6	6
Laundry tub or clotheswasher (each pair of faucets) ...	2	4
Lavatory.....	1	2
Lavatory (dental).....	1	1
Lawn sprinklers (standard type, each head).....	1	1
Shower (each head).....	2	4
Sink (bar).....	1	2
Sink or dishwasher.....	2	4
Sink (flushing rim, clinic).....	—	10
Sink (washup, each set of faucets).....	—	2
Sink (washup, circular spray).....	—	4
Urinal (pedestal or similar type).....	—	10
Urinal (stall).....	—	5
Urinal (wall).....	—	5
Urinal (flush tank).....	—	3
Water closet (flush tank).....	3	5
Water closet (flushometer-tank).....	3	5
*Water closet (flushometer valve).....	*	*

Water supply outlets for items not listed above shall be computed at their maximum demand, but in no case less than:

3/8 inch (9.5 mm).....	1	2
1/2 inch (12.7 mm).....	2	4
3/4 inch (19.1 mm).....	3	6
1 inch (25.4 mm).....	6	10

Revise footnote to read as follows:

* See subsection (k) of Section 1009 for method of sizing flushometer valve installations using Table 10-2.

NEW SECTION

WAC 51-26-1301 General. Section 1301--General.

The regulation of this chapter shall govern the construction, location, and installation of all fuel burning and other water heaters heating potable water, together with all chimneys, vents, and their connectors. All design, construction, and workmanship shall be in conformity with accepted engineering practices 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 Administrative Authority. (For the convenience of users of this Code, a list of generally accepted gas equipment standards is included at the end of Chapter 2 of this Code in Table A.)

Any water system containing storage water heating equipment shall be provided with an approved, listed, adequately sized combination pressure and temperature relief valve, except for listed non-storage instantaneous heaters having an inside diameter of not more than three (3) inches. Each such approved combination pressure and temperature relief valve shall be installed on the water heating device in an approved location based on its listing requirements and the manufacturer's instructions. Each such combination pressure and temperature relief valve shall be provided with a drain as required in Section 1007(e) of the U.P.C. A new listed and approved combination pressure and temperature relief valve shall be installed on all water storage heater equipment replacements.

AMENDATORY SECTION (Amending WSR 93-01-164, filed 12/23/92, effective 7/1/93)

WAC 51-26-1803 Water efficiency standards. Sec. 1803. (a) Standards for Vitreous China Plumbing Fixtures. 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-1990	Vitreous China Plumbing Fixtures
ANSI/ASME A112.19.6-1990	Hydraulic Requirements for Water Closets and Urinals
CSA B45	CSA Standards on Plumbing Fixtures ((with the provisions found in WAC 51-26-1810.))

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 ~~... as defined in ANSI/ASME A112.19.2M, Section 5.1.2.3~~ have a maximum water use of 3.5 gallons per flush or 13.25 liters per flush.

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

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

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

(b) Standards for Plumbing Fixture Fittings. 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-1989
CSA B125

Plumbing Fixture Fittings
Plumbing Fittings(~~with the provisions of WAC 51-26-1820~~)

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.

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

AMENDATORY SECTION (Amending WSR 93-01-164, filed 12/23/92, effective 7/1/93)

~~WAC 51-26-1810 ((Marking requirements for vitreous china plumbing fixtures. Sec. 1810. (a) The marking requirements for vitreous china plumbing fixtures contained in this section shall apply to fixtures tested in accordance with CSA B45. These requirements are consistent with the marking requirements mandated in ANSI/ASME A112.19.2.~~

~~(b) General. 1. Permanent Marking. Each fixture meeting this Standard (or each fixture component, if fixture is comprised of 2 or more components) shall be marked with the manufacturer's name or registered trademark, or in the case of private labeling, of the customer for whom the unit was manufactured. This mark shall be legible, readily identified, and applied so as to be permanent. The mark shall be located so as to be visible after the fixture is installed, except for fixtures built into or for a counter or cabinet.~~

~~2. Compliance with Standard. Each fixture shall be marked at a location determined by the manufacturer with the designation CSA~~



B45 to signify compliance with this Standard. This mark need not be permanent, but shall be visible after installation.

3. ~~Other Markings.~~ Markings for specific products shall be per subsections (c) through (e).

(c) ~~Seconds.~~ All second grade ware shall be indelibly marked by the manufacturer with 2 parallel lines cut through the glaze into the body of the ware at the locations shown in Fig. 39 of ANSI/ASME A112.19.2M 1990. These cuts shall be filled with a bright red permanent marking which is resistant to the action of hot water. No label shall be placed on seconds. Manufacturer's name, trademark, or private brand name or trademark shall be permanently placed on the fixture as described in subsection (b).

1. All packages containing seconds ("B" grade) shall be clearly identified with 2 red marks adjacent to fixture identification.

(d) ~~Water Closets.~~ 1. ~~Permanent Markings.~~ Tanks and bowls, when sold as a combination, shall be permanently marked both on the bowl and tank with the manufacturer's name or trademark, or private brand name or trademark.

2. ~~Compliance with Standard.~~ Marking shall be per subsection (b) 2.

3. ~~Water Consumption.~~ Water closets, both box and product, shall be labeled in accordance with its consumption classification and the average water consumption in liters for that classification. The fixture label shall be intended for removal by the occupant only, and so state on the label. The minimum wording on the label shall be as follows.

"This fixture qualifies according to CSA test procedures as a low consumption water closet with an average consumption per flush of 6.0 liters or less."

4. ~~Model Numbers.~~ At the manufacturer's option, water closets may be marked with model numbers.

(e) ~~Urinals.~~ 1. ~~Permanent Marking.~~ See subsection (b) 1.

2. ~~Compliance with Standard.~~ See subsection (b) 2.

3. ~~Water Consumption.~~ Urinals, both box and product, shall be labeled in accordance with its consumption classification and the average water consumption in liters for that classification (See ANSI/ASME A112.19.2M 1990, paragraphs 5.3.3.1, 5.3.3.2, and 5.3.3.3). The fixture label shall be intended for removal by the occupant only, and so state on the label. The minimum wording on the label shall be as follows.

"This fixture qualifies according to CSA test procedures as a low consumption urinal with an average consumption per flush of 3.78 liters or less.")) Reserved.

AMENDATORY SECTION (Amending WSR 93-01-164, filed 12/23/92, effective 7/1/93)

WAC 51-26-1820 (~~(Marking requirements for plumbing fixture fittings.~~ Sec. 1820. (a) The marking requirements for plumbing fixture fittings contained in this section shall apply to fixtures tested in accordance with CSA B125. These requirements are

~~consistent with the marking requirements mandated in ANSI/ASME A112.18.1.~~

~~(b) Product. 1. Each fitting shall bear permanent legible markings to identify the manufacturer. This marking shall be the trade name, trademark, or other mark known to identify the manufacturer. Such marking shall be located where it can be seen after installation.~~

~~2. Each shower head, sink faucet, and lavatory faucet shall be marked "CSA B125" to demonstrate compliance with this Standard. The marking shall be by means of either a permanent mark on the product, a label on the product, or a tag attached to the product.~~

~~(c) Package. 1. The package shall be marked with the manufacturer's name and model number.~~

~~2. The package or any label attached to the package for shower heads, sink faucets, and lavatory faucets shall contain at least the following: "CSA B125" and "9.5 lpm." The flow rate values shall be the actual flow rate or 9.5 lpm (2.5 gpm) in the case of shower heads, sink faucets, and lavatory faucets; or the actual flow rate or 1.9 lpm (0.5 gpm) in the case of public lavatory faucets (other than metering faucets).~~

~~3. For other products, it is recommended that the package or package label be marked with "CSA B125.") Reserved.~~

AMENDATORY SECTION (Amending WSR 93-01-164, filed 12/23/92, effective 7/1/93)

WAC 51-26-1830 Accepted plumbing fixtures and fixture fittings. Sec. 1830. Plumbing fixtures and fixture fittings which are tested in accordance with the standards listed herein and listed by either the International Association of Plumbing and Mechanical Officials or the Canadian Standards Association may be approved by the Administrative Authority for installation. Under Section 201, the Administrative Authority may approve plumbing fixtures and fixture fittings, not listed by either the International Association of Plumbing and Mechanical Officials or the Canadian Standards Association, PROVIDED the products meet the testing, and marking and labeling requirements listed in WAC 51-26-1803 ((, 1810, and 1820)).

The State Building Code Council will publish and distribute a current list of fixtures and fixture fittings that meet the standards listed within Chapter 18 and have been listed with either the International Association of Mechanical and Plumbing Officials or the Canadian Standards Association.

AMENDATORY SECTION (Amending WSR 92-01-066, filed 12/13/91, effective 7/1/92)

WAC 51-26-2200 Chapter 22--Minimum plumbing facilities. WAC 51-26-2200 MINIMUM PLUMBING FACILITIES Table 29-A -MINIMUM PLUMBING

FIXTURES is located in Chapter 29 of the Uniform Building Code, as adopted in WAC 51-30-2900.

~~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)	Bathubs or Showers (Fixtures per Person)	Drinking Fountains ^{3, 13} (Fixtures per Person)
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Assembly Places	Male		Female ¹⁴		Male	Female
	1-1-15	1-1-15	0-1-9	1 per 40		
Theaters,	1-1-15	1-1-15	0-1-9	1 per 40	1 per 40	
Auditoriums,	2-16-35	3-16-35	1-10-50			
Convention Halls,	3-36-55	4-36-55				
etc. for permanent employee use	Over 55, add 1 fixture for each additional 40 persons.		Add one fixture for each additional 50 males.			

Assembly Places	Male		Female ¹⁴		Male	Female	1 per 75 ¹²
	1-1-100	3-1-50	1-1-100	1-1-200			
Theatres,	1-1-100	3-1-50	1-1-100	1-1-200	1-1-200		
Auditoriums,	2-101-200	4-51-100	2-101-200	2-201-400	2-201-400		
Convention Halls,	3-201-400	8-101-200	3-201-400	3-401-750	3-401-750		
etc. for public use	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	Male		Female ¹⁴		Male	Female	1 per 75 ¹²
	1 per 10	1 per 8	1 per 25	1 per 12			
	1 per 10	1 per 8	1 per 25	1 per 12	1 per 12	1 per 8	
	Add 1 fixture for each additional 25 males (over 10) and 1 for each additional 20 females (over 0).		Over 150, add 1 fixture for each additional 50 males.		Over 12 add one fixture for each additional 20 males and 1 for each 20 additional females.		

Dormitories for staff use	Male		Female ¹⁴		Male	Female	1 per 8
	1-1-15	1-1-15	1 per 50	1 per 40			
	1-1-15	1-1-15	1 per 50	1 per 40	1 per 40	1 per 40	
	Over 55, add 1 fixture for each additional 40 persons.						

Dwellings ⁴	Single Dwelling		Multiple Dwelling or Apartment House	
	1 per dwelling	1 per dwelling or apartment unit	1 per dwelling or apartment unit	1 per dwelling or apartment unit
	1 per dwelling	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)	Bathubs or Showers (Fixtures per Person)	Drinking Fountains (Fixtures per Person)
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Hospital Waiting rooms	1 per room		1 per room		1 per 75 ¹²
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Hospital for employee use	Male	Female	0:1:0	Male	Female
	1:1-15	1:1-15	0:1:0	1 per 40	1 per 40
	2:16-35	3:16-35	1:10-50		
	3:36-55	4:36-55			

~~Over 55, add 1 fixture for each additional 40 persons.~~
~~Add one fixture for each additional 50 males.~~

Hospitals:	Individual Room	Word Room	1 per room	1 per 10 patients	1 per room	1 per 20 patients	1 per 75 ¹²
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Industrial ⁶	Male	Female	Up to 100, 1 per 10 persons	1 shower for each 15 persons exposed to excessive heat or to skin contamination with poisonous, infectious, or irritating material	1 per 75 ¹²
Warehouses	1:1-10	1:1-10			
Workshops, foundries and similar establishments (for employee use)	2:11-25	2:11-25	Over 100, 1 per 15 persons		
	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.				

Institutional:	Male	Female ¹⁴	0:1:0	Male	Female	1 per 8	1 per 75 ¹²
Other than Hospitals or Penal Institutions (on each occupied floor)	1 per 25	1 per 30	1:10-50	1 per 10	1 per 10		
			Add one fixture for each additional 50 males.				

Institutional:	Male	Female ¹⁴	0:1:0	Male	Female	1 per 8	1 per 75 ¹²
Other than Hospitals or Penal Institutions (on each occupied floor)	1:1-15	1:1-15	1:10-50	1 per 40	1 per 40		
Hospitals or Penal Institutions (on each occupied floor)	2:16-35	3:16-35					
	3:36-55	4:36-55					
	Over 55, add 1 fixture for each additional 40 persons.		Add one fixture for each additional 50 males.				

Office or Public Buildings	Male	Female ¹⁴	1:1-100	Male	Female	1 per 8	1 per 75 ¹²
	1:1-100	3:1-50	2:101-200	1:1-200	1:1-200		
	2:101-200	4:51-100	3:201-400	2:201-400	2:201-400		
	3:201-400	8:101-200	4:401-600	3:401-750	3:401-750		
	1:1-201-400		Over 600, add 1 fixture for each additional 300 males and 2 for each 300 females.	Over 750, add one fixture for each additional 500 persons.			

Office or Public Buildings: For employee use	Male	Female ¹⁴	Over 55, add 1 fixture for each additional 40 persons.	Male	Female	0:1:0	1:10-50	Add one fixture for each additional 50 males.	Male	Female	1 per 40	1 per 40
	1:1-15	1:1-15										
	2:16-35	3:16-35										
	3:36-55	4:36-55										

Type of Building or Occupancy	Water Closets (fixtures per Person)	Urinals ¹⁰ (fixtures per Person)	Lavatories (fixtures per Person)	Bathrooms or Showers (fixtures per Person)	Drinking Fountains (fixtures per Person)
Penal Institutions for employee use	Male 1:1-15 Female 1:1-15 2:16-35 3:36-55 4:36-55	0:1-9 1:10-50	Male 1 per 40 Female 1 per 40		1 per 75 ¹²
	Over 55, add 1 fixture for each additional 40 persons. Add one fixture for each additional 50 males.				
Penal Institutions for prison use					1 per cell block floor
Cell	1 per cell		1 per cell		
Exercise room	1 per exercise room	1 per exercise room	1 per exercise room		1 per exercise room
Restaurants, Pubs and Lounges	Male 1:1-50 Female 1:1-50 2:51-150 3:151-300 4:151-300	1:1-150	Male 1:1-150 Female 1:1-150 2:151-200 3:201-400 4:201-400		
	Over 300, add 1 fixture for each additional 200 persons. Over 150, add 1 fixture for each additional 150 males. 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 3:36-55	1 per 50	Male 1 per 40 Female 1 per 40		
	Over 55, add 1 fixture for each additional 40 persons.				
Schools - For student use	Male 1:1-20 Female 1:1-20 2:21-50 3:51-100		Male 1:1-25 Female 1:1-25 2:26-50 3:51-100		1 per 75 ¹²
	Over 50, add 1 fixture for each additional 50 persons. Over 50, add 1 fixture for each additional 50 persons.				
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 1 per 75 2:126-250 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 1 per 75 2:151-300 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 sink, 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) linear inches (609.6 mm) of wash sink or eighteen (18) inches (457.2 mm) of a circular basin, when provided with water outlets for each space, shall be considered equivalent to one (1) lavatory.~~
 - ~~9. Laundry trays, one (1) for each fifty (50) persons. Shop 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.~~