

CHAPTER 29

PLUMBING SYSTEMS

Note: Chapter 29 is entirely Seattle amendments to the *International Building Code* and is not underlined.

SECTION 2901 PLUMBING AND FOOD CODES

2901.1 Plumbing and food codes. Plumbing systems shall comply with the *Uniform Plumbing Code*. See also the Seattle Food Code, SMC Title 10, Subchapter XLI.

SECTION 2902 GENERAL

2902.1 Enforcement. Authority to enforce Section 2902 is vested in the Director of Public Health.

2902.1.1 General. Plumbing fixtures shall be provided in the minimum number shown in Table 2902.1 and in this Chapter. Where the proposed occupancy is not listed in Table 2902.1, the building official shall determine fixture requirements based on the occupancy which most nearly resembles the intended occupancy.

Plumbing fixtures need not be provided for unoccupied buildings or facilities.

2902.1.2 Private offices. Fixtures accessible only to private offices shall not be counted to determine compliance with this section.

2902.1.3 Occupant load distribution. The occupant load shall be divided equally between the sexes, unless data approved by the building official indicates a different distribution of the sexes.

2902.1.4 Food preparation areas. In food preparation, serving and related storage areas, additional fixture requirements may be dictated by health codes.

2902.1.5 Other requirements. For other requirements for plumbing facilities, see Sections 419.15, 1210 and Chapter 11.

2902.2 Access to fixtures.

2902.2.1 Location. Plumbing fixtures shall be located in each building or conveniently in a building adjacent thereto on the same property.

2902.2.2 Multiple tenants. Access to toilets serving multiple tenants shall be through a common use area and not through an area controlled by a tenant.

2902.2.3 Multi-story buildings. Required fixtures shall not be located more than one vertical story above or below the area served.

2902.3 Separate facilities.

2902.3.1 Requirements. Separate toilet facilities shall be provided for each sex.

Exception: In occupancies serving 15 or fewer persons, one toilet facility designed for use by no more than one person at a time shall be permitted for use by both sexes.

2902.3.2 Food service establishments. When customers and employees share the same facilities, customers accessing the facilities shall be excluded from food preparation and storage areas.

2902.4 Pay facilities. Required facilities shall be free of charge. Where pay facilities are installed, they shall be in addition to the minimum required facilities.

SECTION 2903 SPECIAL PROVISIONS

2903.1 Group R occupancies.

2903.1.1 Dwelling units. Dwelling units shall contain within a separate room(s), accessible from inside the dwelling unit or residence, a water closet, a lavatory, and a bathtub or shower.

2903.1.2 Hotels and other buildings containing guest rooms. In hotels and other buildings containing guest rooms, where private water closets, lavatories and baths are not provided, there shall be provided on each floor at least one water closet and lavatory and one bathtub or shower accessible from a public hallway. Additional water closets, lavatories, and bathtubs or showers shall be provided on each floor at the rate of one for every additional 8 guests or occupants, or fractional number thereof in excess of 8.

On floors with fewer than 8 occupants, the required sanitary facilities may be provided on an adjacent floor if the floor on which the facilities are provided is directly and readily accessible to such occupants and if such use does not cause the facilities to be used by a total of more than 8 persons.

2903.1.3 Kitchens. Dwelling units shall be provided with a kitchen. Kitchens shall be provided with a kitchen sink, hot and cold running water.

2903.2 Water closet space requirements. The water closet stool in all occupancies shall be located in a clear space not less than 30 inches (762 mm) in width, with a clear space in front of the stool of not less than 24 inches (610 mm).

2903.3 Water. Each required sink, lavatory, bathtub and shower stall shall be equipped with hot and cold running water necessary for its normal operation.

TABLE 2902.1
MINIMUM PLUMBING FIXTURES^{1,2,4,6}

TYPE OF BUILDING OR OCCUPANCY ⁸	WATER CLOSETS (fixtures per person)		LAVATORIES ⁵ (fixtures per person)		BATHTUBS OR SHOWERS (fixtures per person)
	MALE ³	FEMALE	MALE	FEMALE	
For the occupancies listed below, use 30 square feet (2.79 m ²) per occupant for the minimum number of plumbing fixtures.					
Group A					
Conference rooms, dining rooms, drinking establishments, exhibit rooms, gymnasiums, lounges, stages and similar uses including restaurants classified as Group B occupancies	1:1-25	1:1-25	One per 2 water closets		
	2:26-75	2:26-75			
	3:76-125	3:76-125			
	4:126-200	4:126-200			
	5:201-300	5:201-300			
	6:301-400	6:301-400			
	Over 400, add one fixture for each additional 200 males or 150 females				
For the assembly occupancies listed below, use the number of fixed seating or, where no fixed seating is provided, use 15 square feet (1.39 m ²) per occupant for the minimum number of plumbing fixtures.					
Assembly places — Theaters, auditoriums, convention halls, dance floors, lodge rooms, casinos, and such places which have limited time for fixture use (intermissions)	1:1-100	One per 25	1:1-200	1:1-200	
	2:101-200	Up to 400	2:201-400	2:201-400	
	3:201-400		3:401-750	3:401-750	
	Over 400, add one fixture for each additional 250 males or 50 females		Over 750, add one fixture for each additional 500 persons		
Assembly places — Stadiums, arenas and other sporting facilities where fixture use is not limited to intermissions	1:1-100	One per 50	1:1-200	1:1-200	
	2:101-200	Up to 400	2:201-400	2:201-400	
	3:201-400		3:401-750	3:401-750	
	Over 400, add one fixture for each additional 300 males or 100 females		Over 750, add one fixture for each additional 500 persons		
For the assembly occupancies listed below, use the number of fixed seating or, where no fixed seating is provided, use 30 square feet (2.79 m ²) per occupant for the minimum number of plumbing fixtures.					
Worship places					
Principal assembly area	One per 150	One per 75	One per 2 water closets		
Educational & activity unit	One per 125	One per 75	One per 2 water closets		
For the occupancies listed below, use 200 square feet (18.58 m ²) per occupant for the minimum number of plumbing fixtures.					
Group B and other clerical or administrative employee accessory use	1:1-15	1:1-15	One per 2 water closets		
	2:16-35	2:16-35			
	3:36-55	3:36-55			
	Over 55, add one for each additional 50 persons				
For the occupancies listed below, use 100 square feet (9.3 m ²) per student for the minimum number of plumbing fixtures.					
Group E	1:1-15	1:1-15	One per 2 water closets		
Schools — for staff use	2:16-35	2:16-35			
All schools	3:36-55	3:36-55			
(One staff per 20 students)	Over 55, add one fixture for each additional 40 persons				
Schools — for student use Day care	1:1-20	1:1-20	1:1-20	1:2-20	
	2:21-50	2:21-50	2:21-50	2:21-50	
	Over 50, add one fixture for each additional 50 persons		Over 50, add one fixture for each additional 50 persons		

(continued)

TABLE 2902.1 — continued
MINIMUM PLUMBING FIXTURES^{1,2,4,6}

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TYPE OF BUILDING OR OCCUPANCY ⁸	WATER CLOSETS (fixtures per person)		LAVATORIES ⁵ (fixtures per person)		BATHTUBS OR SHOWERS (fixtures per person)
	MALE ³	FEMALE	MALE	FEMALE	
Elementary	One per 30	One per 25	One per 2 water closets		
Secondary	One per 40	One per 30	One per 2 water closets		
For the occupancies listed below, use 50 square feet (4.65 m ²) per occupant for the minimum number of plumbing fixtures.					
Education facilities other than Group E					
Others (colleges, universities, adult centers, etc.)	One per 40	One per 25	One per 2 water closets		
For the occupancies listed below, use 2,000 square feet (185.8 m ²) per occupant for the minimum number of plumbing fixtures.					
Group F and Group H					
Workshop, foundries and similar establishments, and hazardous occupancies	1:1-10	1:1-10	One per 2 water closets		One shower for each 15 persons exposed to excessive heat or to skin contamination with irritating materials
	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 one fixture for each additional 30 persons				
For the occupancies listed below, use the designated application and 200 square feet (18.58 m ²) per occupant of the general use area for the minimum number of plumbing fixtures.					
Group I⁷					
Hospital waiting rooms	One per room (usable by either sex)		One per room		
Hospital general use areas	1:1-15	1:1-15	One per 2 water closets		
	2:16-35	2:16-35			
	3:36-55	3:36-55			
	Over 55, add one fixture for each additional 40 persons				
Hospital patient rooms:					
Single Bed	One adjacent to and directly accessible from		One per toilet room	One per toilet room	
Isolation	One adjacent to and directly accessible from		One per toilet room	One per toilet room	
Multibed	One per 4 patients		One per 4 patients	One per 8 patients	
Long-term	One per 4 patients		One per 4 patients	One per 15 patients	
Jails and reformatories:					
Cell	One per cell		One per cell		
Exercise room	One per exercise room		One per exercise room		
Other institutions (on each occupied floor)	One per 25	One per 25	One per 2 water closets	One per 8	
Group LC	For Group LC Occupancies, the minimum number of plumbing fixtures is specified in Section 419.15.				
For the occupancies listed below, use 200 square feet (18.58 m ²) per occupant for the minimum number of plumbing fixtures.					
Group M					
Retail or wholesale stores	1:1-50	1:1-50	One per 2 water closets		
	2:51-100	2:51-100			
	3:101-400	3:101-200			
		4:201-300			
		5:301-400			
	Over 400, add one fixture for each additional 300 males or 150 females				

(continued)

TABLE 2902.1 — continued
MINIMUM PLUMBING FIXTURES^{1,2,4,6}

TYPE OF BUILDING OR OCCUPANCY ⁸	WATER CLOSETS (fixtures per person)		LAVATORIES ⁵ (fixtures per person)		BATHTUBS OR SHOWERS (fixtures per person)
	MALE ³	FEMALE	MALE	FEMALE	
For Group R occupancies containing dwelling units or guest rooms, use the table below. For dormitories, use 200 square feet (18.58 m ²) per occupant for the minimum number of plumbing fixtures.					
Group R					
Dwelling units	One per dwelling unit		One per dwelling unit		One per dwelling unit
Hotel, motel, and boarding house guest rooms	One per guest room		One per guest room		One per guest room
Dormitories	One per 10	One per 8	One per 12	One per 12	One per 8
	Over 10, add one fixture for each additional 25 males and over 8, add one for each additional 20 females		Over 12, add one fixture for each additional 20 males and one for each additional 15 females		For females, add one additional unit per each additional 30. Over 150 persons, add one additional unit per each additional 20 persons
For the occupancies listed below, use 5,000 square feet (464.5 m ²) per occupant for the minimum number of plumbing fixtures.					
Group S Warehouses	1:1-10	1:1-10	One per 40 occupants of each sex		One shower for each 15 persons exposed to excessive heat or to skin contamination with poisonous, infectious or irritating materials
	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 one for each 30 persons				

1. The figures shown are based on one fixture being the minimum required for the number of persons indicated or any fraction thereof.
2. For occupancies not shown, see Section 2902.1.1.
3. Where urinals are provided, one 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 one quarter (25%) of the minimum specified. For men's facilities serving 26 or more persons, not less than one urinal shall be provided.
4. For drinking fountains, see Section 2903.4.
5. Twenty-four inches (610 mm) of wash sink or 18 inches (457 mm) of a circular basin, when provided with water outlets for such space, shall be considered equivalent to one lavatory.
6. For when a facility may be usable by either sex, see Section 2902.3.1.
7. See WAC 246-320 for definitions, other fixtures and equipment for hospitals.
8. When a space is accessory to or included as a part of a different occupancy group per Chapter 3, the area per occupant for the minimum plumbing fixture number is to be determined by its own specific use or purpose, not by that of the building's occupancy group.

2903.4 Drinking fountains.

2903.4.1 Number. Occupant loads over 30 shall have one drinking fountain for the first 150 occupants, then one per each additional 500 occupants.

Exceptions:

1. Sporting facilities with concessions serving drinks shall have one drinking fountain for each 1000 occupants.
2. A drinking fountain need not be provided in a drinking or dining establishment.

2903.4.2 Multi-story buildings. Drinking fountains shall be provided on each floor having more than 30 occupants in schools, dormitories, auditoriums, theaters, offices and public buildings.

2903.4.3 Penal institutions. Penal institutions shall have one drinking fountain on each cell block floor and one on each exercise floor.

2903.4.4 Location. Drinking fountains shall not be located in toilet rooms.

2903.5 Fixtures. All plumbing fixtures shall be trapped and vented and connected to a sanitary sewer or to an approved private sewage disposal system. There shall be an approved system of water supply, providing both hot and cold running water at a rate of not less than one gallon per minute. All water closets shall be flush type in good working order.

Exception: Composting toilets shall comply with standards specified by the Director of Public Health.