CHAPTER 29

PLUMBING SYSTEMS

SECTION 2901
GENERAL

[P] 2901.1 Scope. The provisions of this chapter and the ((~~*International*~~)) *Uniform Plumbing Code* shall govern the erection, installation, alteration, repairs, relocation, replacement, addition to, use or maintenance of plumbing equipment and systems. Toilet and bathing rooms shall be constructed in accordance with Section 1210. Plumbing systems and equipment shall be constructed, installed and maintained in accordance with the ((~~*International*~~)) *Uniform Plumbing Code*. ((~~Private sewage disposal systems shall conform to the *International Private Sewage Disposal Code*.~~))

2901.2 Enforcement. The Director of Public Health–Seattle and King County is authorized to enforce this chapter.

[W] 2901.3 Health codes. In food preparation, serving and related storage areas, additional fixture requirements may be dictated by state and local health codes.

SECTION 2902
MINIMUM PLUMBING FACILITIES

[W] [P] 2902.1 Minimum number of fixtures. Plumbing fixtures shall be provided in the minimum number as shown in Table 2902.1 ((~~based on the actual use of the building or space~~)). Uses not shown in Table 2902.1 shall be ((~~considered~~)) determined individually by the ((~~code~~)) *building official* based on the occupancy which most nearly resembles the proposed occupancy. The number of occupants shall be determined by this code. Plumbing fixtures need not be provided for unoccupied buildings or facilities.

[P] 2902.1.1 Fixture calculations. To determine the occupant load of each sex, the total occupant load shall be divided in half. To determine the required number of fixtures, the fixture ratio or ratios for each fixture type shall be applied to the occupant load of each sex in accordance with Table 2902.1. Fractional numbers resulting from applying the fixture ratios of Table 2902.1 shall be rounded up to the next whole number. For calculations involving multiple occupancies, such fractional numbers for each occupancy shall first be summed and then rounded up to the next whole number.

[P] TABLE 2902.1
MINIMUM NUMBER OF REQUIRED PLUMBING FIXTURES[a]
(See Sections 2902.1.1 and 2902.2)

No.	CLASSIFICATION	OCCUPANCY	DESCRIPTION	WATER CLOSETS (((~~URINALS SEE SECTION 419.2 OF THE *INTERNATIONAL PLUMBING CODE*~~)))		LAVATORIES		BATHTUBS/ SHOWERS	((~~DRINKING FOUNTAINS (SEE SECTION 410 OF THE *INTERNATIONAL PLUMBING CODE*~~)	~~OTHER~~))
				Male	Female	Male	Female			
1	Assembly (continued)	A-1[d]	Theaters and other buildings for the performing arts and motion pictures	1 per 125	1 per 65	1 per 200		—	((~~1 per 500~~	~~1 service sink~~))
		A-2[d]	Nightclubs, bars, taverns, dance halls and buildings for similar purposes	1 per 40	1 per 40	1 per 75		—	((~~1 per 500~~	~~1 service sink~~))
			Restaurants, banquet halls and food courts	1 per 75	1 per 75	1 per 200		—	((~~1 per 500~~	~~1 service sink~~))
		A-3[d]	Auditoriums without permanent seating, art galleries, exhibition halls, museums, lecture halls, libraries, arcades and gymnasiums	1 per 125	1 per 65	1 per 200		—	((~~1 per 500~~	~~1 service sink~~))
			Passenger terminals and transportation facilities	1 per 500	1 per 500	1 per 750		—	((~~1 per 1,000~~	~~1 service sink~~))
			Places of worship and other religious services	1 per 150	1 per 75	1 per 200		—	((~~1 per 1,000~~	~~1 service sink~~))

(continued)

[P] TABLE 2902.1—(continued)
MINIMUM NUMBER OF REQUIRED PLUMBING FIXTURES[a]
(See Sections 2902.1.1 and 2902.2)

No.	CLASSIFICATION	OCCUPANCY	DESCRIPTION	WATER CLOSETS (URINALS SEE SECTION 419.2 OF THE *INTERNATIONAL PLUMBING CODE*)		LAVATORIES		BATHTUBS/ SHOWERS	((~~DRINKING FOUNTAINS (SEE SECTION 410 OF THE INTERNATIONAL PLUMBING CODE~~)	~~OTHER~~))
				Male	Female	Male	Female			
1	Assembly	A-4	Coliseums, arenas, skating rinks, pools and tennis courts for indoor sporting events and activities	1 per 75 for the first 1,500 and 1 per 120 for the remainder exceeding 1,500	1 per 40 for the first 1,520 and 1 per 60 for the remainder exceeding 1,520	1 per 200	1 per 150	—	((~~1 per 1,000~~	~~1 service sink~~))
		A-5	Stadiums, amusement parks, bleachers and grandstands for outdoor sporting events and activities	1 per 75 for the first 1,500 and 1 per 120 for the remainder exceeding 1,500	1 per 40 for the first 1,520 and 1 per 60 for the remainder exceeding 1,520	1 per 200	1 per 150	—	((~~1 per 1,000~~	~~1 service sink~~))
2	Business	B	Buildings for the transaction of business, professional services, other services involving merchandise, office buildings, banks, light industrial and similar uses	1 per 25 for the first 50 and 1 per 50 for the remainder exceeding 50		1 per 40 for the first 80 and 1 per 80 for the remainder exceeding 80		—	((~~1 per 100~~	~~1 service sink~~[e]))
3	Educational	E	Educational facilities	1 per 35 ((~~50~~))	1 per 25	1 per 85	1 per 50	—	((~~1 per 100~~	~~1 service sink~~))
4	Factory and industrial	F-1 and F-2	Structures in which occupants are engaged in work fabricating, assembly or processing of products or materials	1 per 100		1 per 100		See ((~~Section 411 of the International Plumbing Code~~)) footnote f	((~~1 per 400~~	~~1 service sink~~))
5	Institutional	I-1	Residential care	1 per 10		1 per 10		1 per 8	((~~1 per 100~~	~~1 service sink~~))
		I-2	Hospitals, ambulatory nursing home care recipient[b]	1 per room[c]		1 per room[c]		1 per 15	((~~1 per 100~~	~~1 service sink~~))
			Employees, other than residential care[b]	1 per 25		1 per 35		—	((~~1 per 100~~	~~—~~))
			Visitors, other than residential care	1 per 75		1 per 100		—	((~~1 per 500~~	~~—~~))
		I-3	Prisons[b]	1 per cell		1 per cell		1 per 15	((~~1 per 100~~	~~1 service sink~~))
		I-3	Reformatories, detention centers and correctional centers[b]	1 per 15		1 per 15		1 per 15	((~~1 per 100~~	~~1 service sink~~))
			Employees[b]	1 per 25		1 per 35		—	((~~1 per 100~~	~~—~~))
		I-4	Adult day care and child day care	1 per 15		1 per 15		1	((~~1 per 100~~	~~1 service sink~~))

(continued)

[P] TABLE 2902.1—continued
MINIMUM NUMBER OF REQUIRED PLUMBING FIXTURES[a]
(See Sections 2902.1.1 and 2902.2)

No.	CLASSIFICATION	OCCUPANCY	DESCRIPTION	WATER CLOSETS (URINALS SEE SECTION 419.2 OF THE *INTERNATIONAL PLUMBING CODE*)		LAVATORIES		BATHTUBS OR SHOWERS	((~~DRINKING FOUNTAINS (SEE SECTION 410 OF THE *INTERNATIONAL PLUMBING CODE*~~)	~~OTHER~~))
				Male	Female	Male	Female			
6	Mercantile	M	Retail stores, service stations, shops, salesrooms, markets and shopping centers	1 per 500		1 per 750		—	((~~1 per 1,000~~	~~1 service sink~~[e]))
7	Residential	R-1	Hotels, motels, boarding houses (transient)	1 per sleeping unit		1 per sleeping unit		1 per sleeping unit	((—	~~1 service sink~~))
		R-2	Dormitories, fraternities, sororities and boarding houses (not transient)	1 per 10		1 per 10		1 per 8	((~~1 per 100~~	~~1 service sink~~))
		R-2	Apartment house	1 per dwelling unit		1 per dwelling unit		1 per dwelling unit	((—	~~1 kitchen sink per dwelling unit; 1 automatic clothes washer connection per 20 dwelling units~~))
		R-3	One- and two-family dwellings and lodging houses with five or fewer guest rooms	1 per dwelling unit		1 per 10		1 per dwelling unit	((—	~~1 kitchen sink per dwelling unit; 1 automatic clothes washer connection per dwelling unit~~))
		R-3	Congregate living facilities with 16 or fewer persons	1 per 10		1 per 10		1 per 8	((~~1 per 100~~	~~1 service sink~~))
		((~~R-4~~	~~Congregate living facilities with 16 or fewer persons~~	~~1 per 10~~		~~1 per 10~~		~~1 per 8~~	~~1 per 100~~	~~1 service sink~~))
8	Storage	S-1 S-2	Structures for the storage of goods, warehouses, storehouses and freight depots, low and moderate hazard	1 per 100		1 per 100		See ((~~Section 411 of the *International Plumbing Code*~~)) footnote f	((~~1 per 1,000~~	~~1 service sink~~))

a. The fixtures shown are based on one fixture being the minimum required for the number of persons indicated or any fraction of the number of persons indicated. The number of occupants shall be determined by this code, except with respect to Group E occupancies the provisions of note "e" shall apply.

b. Toilet facilities for employees shall be separate from facilities for inmates or care recipients.

c. A single-occupant toilet room with one water closet and one lavatory serving not more than two adjacent patient *sleeping units* shall be permitted, provided that each patient *sleeping unit* has direct access to the toilet room and provisions for privacy for the toilet room user are provided.

d. The occupant load for seasonal outdoor seating and entertainment areas shall be included when determining the minimum number of facilities required.

e. For Group E occupancies the number of occupants shall be determined by using a calculation of 100 square feet gross building area per student for the minimum number of plumbing fixtures. ((~~For business and mercantile occupancies with an occupant load of 15 or fewer, service sinks shall not be required.~~))

f. See *Uniform Plumbing Code* Section 416.0 for installation requirements for emergency shower and eyewash equipment.

Exception: The total occupant load shall not be required to be divided in half where approved statistical data indicate a distribution of the sexes of other than 50 percent of each sex.

[W] 2902.1.1.1 Private offices. Fixtures only accessible to private offices shall not be counted to determine compliance with this section.

[W] 2902.1.1.2 Urinals. 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 25 percent of the minimum specified.

[P]2902.1.2 Family or assisted-use toilet and bath fixtures. Fixtures located within family or assisted-use toilet and bathing rooms required by Section 1109.2.1 are permitted to be included in the number of required fixtures for either the male or female occupants in assembly and mercantile occupancies.

[W] [P]2902.2 Separate facilities. Where plumbing fixtures are required, separate facilities shall be provided for each sex.

Exceptions:

1. Separate facilities shall not be required for dwelling units and sleeping units.
2. Separate facilities shall not be required in structures or tenant spaces with a total occupant load, including both employees and customers, of 15 or fewer.
3. Separate facilities shall not be required in mercantile occupancies in which the maximum occupant load is 100 or less.
4. Separate facilities shall not be required in spaces primarily used for drinking or dining with a total occupant load, including both employees and customers, of 30 or fewer.
5. Single-occupant restrooms shall not be restricted to a specific sex or gender identity and shall use appropriate signage to indicate such facilities are designated for use by any person, regardless of sex or gender identity. See SMC 14.07.

[P]2902.2.1 Family or assisted-use toilet facilities serving as separate facilities. Where a building or tenant space requires a separate toilet facility for each sex and each toilet facility is required to have only one water closet, two family or assisted-use toilet facilities shall be permitted to serve as the required separate facilities. Family or assisted-use toilet facilities shall not be required to be identified for exclusive use by either sex as required by Section 2902.4.

[P]2902.3 Employee and public toilet facilities. Customers, patrons and visitors shall be provided with public toilet facilities in structures and tenant spaces intended for public utilization. The number of plumbing fixtures located within the required toilet facilities shall be provided in accordance with Section 2902.1 for all users. Employees shall be provided with toilet facilities in all occupancies. Employee toilet facilities shall be either separate or combined employee and public toilet facilities.

Exception: Public toilet facilities shall not be required in:

1. Open or enclosed parking garages where there are no parking attendants.
2. Structures and tenant spaces intended for quick transactions, including takeout, pickup and drop-off, having a public access area less than or equal to 300 square feet (28 m^2).

[W] [P] 2902.3.1 Access. The route to the public toilet facilities required by Section 2902.3 shall not pass through kitchens, food preparation areas, unpackaged food storage areas, storage rooms or closets. Access to the required facilities shall be from within the building or from the exterior of the building. Access to toilets serving multiple tenants shall be through a common use area and not through an area controlled by a tenant. Routes shall comply with the accessibility requirements of this code. The public shall have access to the required toilet facilities at all times that the building is occupied. For other requirements for plumbing facilities, see Chapter 11.

[W] [P] 2902.3.2 Location of toilet facilities in occupancies other than malls. In occupancies other than covered and open mall buildings, the required public and employee toilet facilities shall be located in each building not more than one *story* above or below the space required to be provided with toilet facilities, or conveniently in a building adjacent thereto on the same property, and the path of travel to such facilities shall not exceed a distance of 500 feet (152 m).

Exception: The location and maximum distances of travel to required employee facilities in factory and industrial occupancies are permitted to exceed that required by this section, provided that the location and maximum distance of travel are approved.

[P] 2902.3.3 Location of toilet facilities in malls. In covered and open mall buildings, the required public and employee toilet facilities shall be located not more than one *story* above or below the space required to be provided with toilet facilities, and the path of travel to such facilities shall not exceed a distance of 300 feet (91 mm). In mall buildings, the required facilities shall be based on total square footage (m^2) within a covered mall building or within the perimeter line of an open mall building, and facilities shall be installed in each individual store or in a central toilet area located in accordance with this section. The maximum distance of travel to central toilet facilities in mall buildings shall be measured from the main entrance of any store or tenant space. In mall buildings, where employees' toilet facilities are not provided in the individual store, the maximum distance of travel shall be measured from the employees' work area of the store or tenant space.

[P] 2902.3.4 Pay facilities. Where pay facilities are installed, such facilities shall be in excess of the required minimum facilities. Required facilities shall be free of charge.

[P] 2902.3.5 Door locking. Where a toilet room is provided for the use of multiple occupants, the egress door for

the room shall not be lockable from the inside of the room. This section does not apply to family or assisted-use toilet rooms. **

[P] 2902.3.6 Prohibited toilet room location. Toilet rooms shall not open directly into a room used for the preparation of food for service to the public.

[P] 2902.4 Signage. Required public facilities shall be provided with signs that designate the sex as required by Section 2902.2. Signs shall be readily visible and located near the entrance to each toilet facility. Signs for accessible toilet facilities shall comply with Section 1111.

[P] 2902.4.1 Directional signage. Directional signage indicating the route to the required public toilet facilities shall be posted in a lobby, corridor, aisle or similar space, such that the sign can be readily seen from the main entrance to the building or tenant space.

[W] [P] 2902.5 Drinking fountain location. Drinking fountains shall not be required to be located in individual tenant spaces provided that public drinking fountains are located within a distance of travel of 500 feet (152 m) of the most remote location in the tenant space and not more than one *story* above or below the tenant space. Where the tenant space is in a covered or open mall, such distance shall not exceed 300 feet (91 440 mm). Drinking fountains shall be located on an *accessible route*. Drinking fountains shall not be located in toilet rooms.

[W] 2902.5.1 Drinking fountain 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 1,000 occupants.
2. A drinking fountain need not be provided in a drinking or dining establishment.

[W] 2902.5.2 Multistory buildings. Drinking fountains shall be provided on each floor having more than 30 occupants in schools, dormitories, auditoriums, theaters, offices and public buildings.

[W] 2902.5.3 Penal institutions. Penal institutions shall have one drinking fountain on each cell block floor and one on each exercise floor.

[W] 2902.5.4 Bottle filling stations. *Bottle filling stations* shall be provided in accordance with Sections 2902.5.4.1 through 2902.5.4.3.

2902.5.4.1 Group E occupancies. In Group E occupancies with an occupant load over 30, a minimum of one *bottle filling station* shall be provided on each floor. This *bottle filling station* may be integral to a drinking fountain.

2902.5.4.2 Substitution. In all occupancies that require more than two drinking fountains per floor or secured area, *bottle filling stations* shall be permitted to be substituted for up to 50 percent of the required number of drinking fountains.

2902.5.4.3 Accessibility. At least one of the required *bottle filling stations* shall be located in accordance with Section 309 of ICC A117.1.

[W] 2902.6 Dwelling units. Dwelling units shall be provided with a kitchen sink.

[W] 2902.7 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).

[W] 2902.8 Water. Each required sink, lavatory, bathtub and shower stall shall be equipped with hot and cold running water necessary for its normal operation.

[P] 2902.9 ((~~2902.6~~)) Small occupancies. Drinking fountains shall not be required for an occupant load of 15 or fewer.