

CHAPTER 29

PLUMBING SYSTEMS

User note:

About this chapter: Plumbing systems are another key element of any building. Chapter 29 provides the necessary number of plumbing fixtures, including water closets, lavatories, bathtubs and showers. The quality and design of each fixture must be in accordance with the International Plumbing Code®.

SECTION 2901 GENERAL

[P] 2901.1 Scope. The provisions of this chapter and the *International Plumbing Code* shall govern the design, construction, erection and installation of plumbing components, appliances, equipment and systems used in *buildings* and structures covered by this code. Toilet and bathing rooms shall be constructed in accordance with Section 1209. Private sewage disposal systems shall conform to the *International Private Sewage Disposal Code*. The *International Fire Code*, the *International Property Maintenance Code* and the *International Plumbing Code* shall govern the use and maintenance of plumbing components, appliances, equipment and systems. The *International Existing Building Code* and the *International Plumbing Code* shall govern the *alteration, repair, relocation, replacement and addition* of plumbing components, *appliances, equipment* and systems.

SECTION 2902 MINIMUM PLUMBING FACILITIES

[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 individually by the code official. The number of occupants shall be determined by this code.

[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.

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.

[P] 2902.1.2 Single-user toilet facility and bathing room fixtures. The plumbing fixtures located in single-user toilet facilities and bathing rooms, including family or assisted-use toilet and bathing rooms that are required by Section 1109.2, shall contribute toward the total number of

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

No.	CLASSIFICATION	DESCRIPTION	WATER CLOSETS (URINALS SEE SECTION 424.2 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	Theaters and other buildings for the performing arts and motion pictures ^d	1 per 125	1 per 65	1 per 200		—	1 per 500	1 service sink
		Nightclubs, bars, taverns, dance halls and buildings for similar purposes ^d	1 per 40	1 per 40	1 per 75		—	1 per 500	1 service sink
		Restaurants, banquet halls and food courts ^d	1 per 75	1 per 75	1 per 200		—	1 per 500	1 service sink
		Casino gaming areas	1 per 100 for the first 400 and 1 per 250 for the remainder exceeding 400	1 per 50 for the first 400 and 1 per 150 for the remainder exceeding 400	1 per 250 for the first 750 and 1 per 500 for the remainder exceeding 750		—	1 per 1,000	1 service sink

(continued)