

BUILDING CODE MANUAL COUNTY OF LOS ANGELES DEPARTMENT OF PUBLIC WORKS BUILDING AND SAFETY DIVISION Based on the 2011 LACBC

PLUMBING FIXTURES GUIDELINES

The following policy establishes guidelines which are intended to develop minimum number of plumbing fixtures for various occupancies and covers new construction, as well as additions and alterations. According to Section 2901 of the Building Code (BC), all plumbing systems shall comply with the Plumbing Code (PC).

Section 412.0 and Tables 4-1, 4-2, 4-3, 4-4, and A of Chapter 4 of the PC shall be used in determining the required number of plumbing fixtures. Table 4-1 applies to all occupancies, while the remaining tables apply to the specific occupancies governed by the adopting State Agencies (see Chapter 4 Matrix Adoption Table in the PC).

For occupancies not listed in Table 4-1 of the PC, the number of required plumbing fixtures shall be determined by the Administrative Authority, as stated in Section 412.4.3 of the PC.

When determining the required number of plumbing fixtures in accordance with Sections A, B, and C, below, Section D shall apply in addition to these requirements as applicable.

A. New Buildings

- 1. Calculate the occupant load using Table A of the PC.
- 2. Determine the required number of fixtures based on the PC Chapter 4 Tables.

B. Existing Buildings

- 1. Change in "Type of Building or Occupancy" as listed in Table 4-1 of the PC shall be treated as a new building.
- 2. Relocated buildings shall be treated as new buildings.
- 3. "Alterations" that do not increase the occupant load and are not a change in occupancy classification but may be a change in use, may maintain their existing nonconforming rights.
- 4. "Additions and alterations" which increase the existing occupant load may use one of the following options:

<u>Option I</u>

a) Calculate the occupant load of the addition or altered area based on Table A of the PC.

- b) Determine the required number of fixtures using the applicable Tables in the PC.
- c) Provide the required number of fixtures within the addition or altered area.
- d) The required number of new fixtures may be located in a common area within the existing building as long as the common area is accessible to and from the addition or altered area.

Option II

- a) Calculate the occupant load of the existing building based on Table A of the PC.
- b) Determine the required number of fixtures from the applicable Tables in the PC.
- c) Calculate the total occupant load for both the existing building and the addition or alteration based on Table A of the PC.
- d) Determine the required number of fixtures from the applicable Tables in the PC.
- e) Subtract the number of required existing fixtures from the number of required existing plus the addition or alteration fixtures.
- f) The difference is the required number of additional fixtures.

Option III

- a) Calculate the occupant load of the addition or alteration based on Table A of the PC.
- b) Determine the number of fixtures from the applicable Tables in the PC.
- c) Determine the number of fixtures that was required for the existing building based on the BC under which the building was permitted.
- d) Subtract the number of required fixtures of the existing building from the actual number of fixtures of the existing building.
- e) Credit the difference to the number of fixtures required for the addition or alteration and provide additional required fixtures if needed.

C. The Following Are Guidelines For Occupancy and Use Not Listed In Table 4-1 of the Plumbing Code:

1. **Financial institutions (banks, credit unions, etc...).** Similar to facilities in mercantile and business occupancies serving customers, Section 412.5.1 of the PC allows a single set of restrooms to be accessible (meaning available) to both customers and employees. The required number of fixtures shall be the greater of the required number for employees or the required number for customers. However, and in many occasions, financial institutions and similar uses opt not to

provide restroom facilities for their customers within the bank premise for obvious security reasons and, instead, provide restrooms only for their employees in a remote and inaccessible location to their customers. When such request is made, the availability of restrooms for the public may be waived.

2. Hotels and motels.

- a) Minimum required restroom facilities at lobby area should contain one toilet fixture for each sex.
- b) For lounge, bar, and restaurant areas, use Table A of the PC to determine the occupant load and calculate the required number of plumbing fixtures per Table 4-1 of the PC.
- c) Hotel guest rooms are required to have one toilet facility.
- d) For conference rooms, ballrooms, meeting and gathering areas, determine the occupant load (OL) based on Table A of the PC and use "assembly places for public use" category of Table 4-1 of the PC.
- 3. Self-service Laundromats. The OL is determined by either using 30 square feet per occupant based on the gross floor area or based on the total number of washers and dryers by counting one occupant for every two machines (either washers or dryers) whichever is less. The number of plumbing fixtures is determined based on the chart below. Regardless of the occupant load, facilities with a total floor area of 1,500 square feet or less need only provide a unisex toilet facility designed for use by both sexes.

Type of Building	Water Closets* (Fixtures Per Person)		Lavatories (Fixtures Per Person)	
	Male	Female	Male	Female
Laundromats	1 : 1-50 2 : 51-100 3 : 101-400	1 : 1-50 2 : 51-100 3 : 101-200 4 : 201-300 5 : 301-400	One for each two water closets	
	Over 400 add one fixture for each additional 500 males and one for each 150 females.			

* 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 two-thirds of the minimum specified.

4. **Sport facilities.** Sport facilities shall be used for assembly purposes to view indoor or outdoor sporting events, such as, football, baseball, tennis ...etc.. To determine the proper OL of the sport facility the use of the facility shall be defined at the time of plan submittal and then the minimum number of plumbing fixtures shall be calculated at 50 percent male and 50 percent female based on the OL. To

determine the OL and the number of plumbing fixtures the following criteria shall be used:

- a) **Public Toilet Facility for Sport Facilities with fixed seating:** Determine the total number of fixed seating and divide it by 2 to establish the OL per Group "A" occupancy of Table A of PC. Based on the OL, the number of plumbing fixtures shall be determined by using Table 4-1 of the PC as required for "assembly places for public use."
- b) **Public Toilet Facility for Sport Facilities without fixed seating:** Determine the total floor area of the public assembly area. Use the occupant load factor from "Group A, Item 1" of Table A of the PC to determine the OL. Based on the OL, determine the number of plumbing fixtures according to Table 4-1 of the PC as required for "assembly places for public use."
- c) **Employee Toilet Facilities:** Number of toilet fixtures for employees and players shall be based on the OL of the locker rooms and offices. The occupant load factor for locker room and office shall be 200 square feet per occupant. Based on the total OL of the employees and players, the number of plumbing fixtures shall be determined by using Table 4-1 of the PC as required for "assembly places for employee use.
- 5. Sport Facility used for sport activities and other events. If the football or baseball playing field, center court, or other areas in the sport facility is used for special events and/or labeled as a multipurpose room, then an additional OL for these areas shall be determined based on a mutual agreement between the applicant, Building Plan Check Section, and Fire Department. This additional OL shall be added to the numbers calculated in Section C4 above.
- 6. **Shell buildings.** The following guidelines shall be used to determine the number of plumbing fixtures and size of sewer and water lines required:
 - a) Calculate the occupant load based on the projected use and occupancy of the building per Table A of the PC.
 - b) Determine the required number of fixtures using the appropriate Tables of the PC.
 - c) Although restrooms need not to be shown on floor plans, a determination of the size of sewer and water lines based on the total number of plumbing fixtures per Item b is required and must be shown on the approved Plumbing and Building Plans.

D. Footnotes

- 1. In multistory buildings, Section 412.2.1 of the PC requires that accessibility (meaning availability) of the plumbing fixtures shall not exceed one vertical story.
- 2. Fixtures available only to private offices shall not be counted to determine compliance.
- 3. For facilities in mercantile and business occupancies serving customers, Section 412.5.1 of the PC allows a single set of restrooms to be accessible (meaning available) to both customers and employees. The required number of fixtures shall be the greater of the required number for employees or the required number for customers. For the purpose of this footnote, business occupancies shall include uses such as food establishments and any other business of commerce.

Exception: One toilet facility, designed for use by no more than one person at a time shall satisfy the separate toilet facilities requirements for serving customers and employees of both sexes if the total floor area is 1500 square feet or less.

- 4. In occupancies serving ten or fewer people, one toilet facility, designed for use by no more than one person at a time, shall be permitted for use by both sexes.
- 5. Access to public restroom facilities (for the customer) shall not be through areas designated "for employee use only."
- 6. Accessibility Requirements for Persons with Disabilities:
 - a. New Facilities When new facilities are provided, they must comply with disabled access regulations of Chapters 11A and 11B of the BC.
 - b. Existing Facilities When the existing facility is to be used in determining the overall required plumbing fixtures count (for both proposed addition and existing area), the existing facilities must comply with disabled access regulations of Chapters 11A and 11B of the BC.

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