



Date: August 29, 2023
To: City of Houston HPW-HPC
Attention: CCM
From: Jensen Hughes
Subject: BOMA – Drinking Fountain Amendment

This technical memo is provided to describe the new changes to the Houston Construction Code with regard to the new amendment related to the requirements of drinking fountains. The new changes bring forth language from the 2021 Edition of the International Plumbing Code (IPC) with regards to the requirements for locations and number of drinking fountains provided in a commercial building.

The City of Houston recognizes the importance of providing a clean source of drinking water to its citizens, while allowing building owners the opportunity to determine the manner for distributing the drinking water that suits the buildings and tenants needs. The City of Houston recognizes that many building owners and tenants provide water dispensing systems for their employees as an approved method of providing the drinking water. This new amendment allows for up to 50% of the required drinking fountains to be replaced with these water dispensing systems. New amendment language is found in Houston Building Code, Section 2904.3.

The new amendments read as follows:

2021 Houston Plumbing Code Changes –

415.0 Drinking Fountains. Drinking fountains shall be in accordance with Section 2904 of the Houston *Building Code*.

{**EDITORIAL NOTE:** THE REMAINDER OF SECTION 415 IS RESERVED AND **NOT ADOPTED** BY THIS JURISDICTION.}

memo.

2021 Houston Building Code Changes –**SECTION 202
GENERAL DEFINITIONS**

DRINKING FOUNTAIN. A plumbing fixture that is connected to the potable water distribution system and the drainage system. The fixture allows the user to obtain a drink directly from a stream of flowing water without the use of any accessories.

WATER COOLER. A drinking fountain that incorporates a means of reducing the temperature of the water supplied to it from the potable water distribution system.

WATER DISPENSER. A plumbing fixture that is manually controlled by the user for the purpose of dispensing potable drinking water into a receptacle such as a cup, glass or bottle. Such fixture is connected to the potable water distribution system of the premises.

**SECTION 2904
DRINKING FOUNTAINS**

2904.1 Approval. Drinking fountains shall conform to ASME A112.19.1/CSA B45.2, ASME A112.19.2/CSA B45.1 or ASME A112.19.3/CSA B45.4, and *water coolers* shall conform to ASHRAE 18. Drinking fountains, *water coolers* and *water dispensers* shall conform to NSF 61, Section 9. Electrically operated, refrigerated drinking *water coolers* and *water dispensers* shall be listed and labeled in accordance with UL 399.

2904.2 High and low drinking fountains. Where drinking fountains are provided on an exterior site, on a floor or within a secured area, the drinking fountains shall be in accordance with Sections 2904.2.1 and 2904.2.2.

[BE] 2904.2.1 Minimum number. Not fewer than two drinking fountains shall be provided. One drinking fountain shall comply with the requirements for people who use a wheelchair and one drinking fountain shall comply with the requirements for standing persons.

Exceptions:

1. A single drinking fountain with two separate spouts that complies with the requirements for people who use a wheelchair and standing persons shall be permitted to be substituted for two separate drinking fountains.
2. Where drinking fountains are primarily for children's use, the drinking fountains for people using wheelchairs shall be permitted to comply with the children's provisions in ICC A117.1 and drinking fountains for standing children shall be permitted to provide the spout at 30 inches (762 mm) minimum above the floor.

[BE] 2904.2.2 More than the minimum number. Where more than the minimum number of drinking fountains specified in Section 2904.2.1 is provided, 50 percent of the total number of drinking fountains provided shall comply with the requirements for persons who use a wheelchair and 50 percent of the total number of drinking fountains provided shall comply with the requirements for standing persons.

Exceptions:

1. Where 50 percent of the drinking fountains yields a fraction, 50 percent shall be permitted to be rounded up or down, provided that the total number of drinking fountains complying with this section equals 100 percent of the drinking fountains.
2. Where drinking fountains are primarily for children's use, drinking fountains for people using wheelchairs shall be permitted to comply with the children's provisions in ICC A117.1 and drinking fountains for standing children shall be permitted to provide the spout at 30 inches (762 mm) minimum above the floor.



2904.3 Substitution. Where restaurants provide drinking water in a container free of charge, drinking fountains shall not be required in those restaurants. In other *occupancies* where three or more drinking fountains are required, *water dispensers* shall be permitted to be substituted for not more than 50 percent of the required number of drinking fountains.

2904.4 Prohibited location. Drinking fountains, *water coolers* and *water dispensers* shall not be installed in *public restrooms*.

SEE BELOW FOR TABLE 2902.1

memo.

CHAPTER 29 PLUMBING SYSTEMS

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

NO.	CLASSIFICATION	DESCRIPTION	WATER CLOSETS ^d (URINALS SEE SECTION 2902.8.419.2 OF THE INTERNATIONAL PLUMBING CODE)		LAVATORIES		BATHTUBS/ SHOWERS	DRINKING FOUNTAINS (SEE SECTION 2904.410 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 <u>60</u>	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
		Auditoriums without permanent seating, art galleries, exhibition halls, museums, lecture halls, libraries, arcades and gymnasiums ^d	1 per 125	1 per 65 <u>60</u>	1 per 200		—	1 per 500	1 service sink
		Passenger terminals and transport facilities ^a	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
		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 <u>35</u> 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
Stadiums, amusement parks, bleachers and grandstands for outdoor sporting events and activities ^f	1 per 75 for the first 1,500 and 1 per 120 for the remainder exceeding 1,500	1 per 40 <u>35</u> 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	Buildings for the transaction of business, professional services,	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		—	1 per 100	1 service sink ^e

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			Male	Female	Male	Female			
		other services involving merchandise, office buildings, banks, light industrial and similar uses					remainder exceeding 80		

(continued)

NO.	CLASSIFICATION	DESCRIPTION	WATER CLOSETS ^a (URINALS SEE SECTION 2902.8 419.2 OF THE INTERNATIONAL PLUMBING CODE)		LAVATORIES		BATHTUBS/ SHOWERS	DRINKING FOUNTAINS (SEE SECTION 2904.410 OF THE INTERNATIONAL PLUMBING CODE)	OTHER
			Male	Female	Male	Female			
3	Educational	Educational facilities	1 per 50		1 per 50		—	1 per 100	1 service sink
		<u>Daycares</u>	<u>1 per 17</u>	<u>1 per 17</u>	—		<u>1 per 100</u>	<u>1 service sink</u>	<u>Daycares</u>
4	Factory and industrial	Structures in which occupants are engaged in work fabricating, assembly or processing of products or materials	1 per 100		1 per 100		—	1 per 400	1 service sink
5	Institutional	Custodial care facilities	1 per 10		1 per 10		1 per 8	1 per 100	1 service sink
		Medical care recipients in hospitals and nursing homes ^b	1 per room ^c		1 per room ^c		1 per 15	1 per 100	1 service sink
		Employees in hospitals and nursing homes ^b	1 per 25		1 per 35		—	1 per 100	—
		Visitors in hospitals and nursing homes	1 per 75		1 per 100		—	1 per 500	—
		Prisons ^b	1 per cell		1 per cell		1 per 15	1 per 100	1 service sink
		Reformatories, detention centers and correctional centers ^b	1 per 15		1 per 15		1 per 15	1 per 100	1 service sink
		Employees in reformatories, detention centers and correctional centers ^b	1 per 25		1 per 35		—	1 per 100	—
6	Mercantile	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	Hotels, motels, boarding houses (transient)	1 per sleeping unit		1 per sleeping unit		1 per sleeping unit	—	1 service sink



NO.	CLASSIFICATION	DESCRIPTION	WATER CLOSETS ^a (URINALS SEE SECTION 2902.8 419.2 OF THE INTERNATIONAL PLUMBING CODE)		LAVATORIES		BATHTUBS/ SHOWERS	DRINKING FOUNTAINS (SEE SECTION 2904.410 OF THE INTERNATIONAL PLUMBING CODE)	OTHER
			Male	Female	Male	Female			
		Dormitories, fraternities, sororities and boarding houses (not transient)	1 per 10		1 per 10		1 per 8	1 per 100	1 service sink
		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

(continued)

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			Male	Female	Male	Female			
7	Residential	One- and two-family dwellings and lodging houses with five or fewer guestrooms	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
		* Congregate living facilities with 16 or fewer persons	1 per 840 (City Code Sec. 10-362.)		1 per 10		1 per 8	1 per 100	1 service sink
8	Storage ^{h,i}	Structures for the storage of goods, warehouses, storehouses and freight depots, low and moderate hazard	1 per 100		1 per 100		—	1 per 1,000	1 service sink

* These are minimum design requirements. The *Building Code* or the *City Code* applies, whichever is more restrictive. See Section 10-362 of the *City Code*.

- 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.
- 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 business and mercantile classifications with an occupant load of 15 or fewer, service sink shall not be required.
- f. The required number and type of plumbing fixtures for outdoor swimming pools shall be in accordance with section 609 of the *International Swimming Pool and Spa Code*.
- g. Structures used for people awaiting transportation, such as transit centers, shall not be required to install employee and public restroom facilities when all the following conditions apply:
 1. The facility includes no onsite employees or security personnel.
 2. The structure is an open-air structure with no enclosing walls.
 3. The structure is only intended to shelter people awaiting transportation.
- h. For the purpose of establishing employee and public restrooms and plumbing fixture requirements the design occupant load of a self-storage warehouse facility containing only normally unoccupied rental units provided with direct exterior access for dropping off and picking up storage of personal possessions shall be based



on the design occupant load of the occupied office building serving that storage facility. The required employee and public restrooms provided at the office building shall be available to the public and all employees who utilize the on-site storage facilities.

- i. One story warehouses and parking garages that are dedicated to a building on site, that do not exceed one story below grade, and include a path of travel to available restroom facilities located within 500 feet located on the same property shall be considered compliant with the provisions of Section 2902.3 for required employee and public restroom facilities.

Houston Plumbing Code Section 415.2 to be deleted:

~~**415.2 Drinking Fountain Alternatives.** Where food is consumed indoors, water stations shall be permitted to be substituted for drinking fountains. Bottle filling stations shall be permitted to be substituted for drinking fountains up to 50 percent of the requirements for drinking fountains. Drinking fountains shall not be required for an occupant load for 30 or less.~~