REVISION RECORD
FOR THE STATE OF CALIFORNIA

EMERGENCY SUPPLEMENT

EFFECTIVE DATES VARY (See History Note)

2013 Title 24, Part 5
CALIFORNIA PLUMBING CODE

General Information:

1. This supplement provides emergency building standards which were made permanent by the Building Standards Commission on January 20, 2016, and April 19, 2016, and filed with Secretary of State on January 26, 2016, and April 26, 2016 respectively. The included emergency building standards supersede the initial emergency building standards that became effective on October 23, 2015, and December 17, 2015, as noted in the history note. An emergency supplement was not issued for the initial emergency building standards but was provided with a Building Standards Commission Information Bulletin 15-04 dated October 23, 2015, which is now superseded.

> **Clarification:** Emergency building standards become effective upon adoption but remain in place and enforceable for only 180 days pursuant to Government Code Section 11346.2 to 11347.3. For the emergency building standards to become a permanent adoption the state agency initiating the emergency adoption must complete the required rulemaking process before the expiration date. The required process includes an opportunity for the public to review and comment on the initially adopted regulatory language of the building standard. The enclosed emergency building standards are the final adoption superseding the original adopted emergency standards.

2. This emergency supplement provides new or replacement blue supplement pages with building standards approved by the California Building Standards Commission on an emergency basis for insertion in for California Code of Regulations, Title 24, Part 5, the 2013 California Plumbing Code. Existing Part 5 pages should be replaced by pages provided with this Supplement. Instructions are provided below.

3. Health and Safety Code Section 18938.5, establishes that only building standards in effect at the time of the application for a building permit may be applied to the project plans and construction. This rule applies to both adoptions of building standards for Title 24 by the California Building Standards Commission and local adoptions and ordinances imposing building standards.

4. Not all code text on the enclosed blue emergency supplement pages is a new or amended building standard. New, amended, or repealed building standards are identified by margin symbols. An explanation of margin symbols is provided in the code before the Table of Contents.

5. You may wish to retain the superseded material with this revision record so that the prior wording of any section can be easily ascertained.

Part 5

Remove Existing Pages	Insert Blue-Colored Pages
ix – x	ix - x
49 - 69	49 - 70
585 - 586	585 - 586

CALIFORNIA PLUMBING CODE – MATRIX ADOPTION TABLE
CHAPTER 4 - PLUMBING FIXTURES AND FIXTURE FITTINGS

(Matrix Adoption Tables are non-regulatory, intended only as an aid to the user. See Chapter 1 for state agency authority and building application.)

Adopting Agency	BSC	SFM	HCD			DSA			OSHPD				BSCC	DPH	AGR	DWR	CA	SL	SLC
			1	2	1-AC	AC	SS	SS/CC	1	2	3	4							
Adopt Entire Chapter																			
Adopt Entire Chapter as amended (amended sections listed below)	X		X	X			X	X	X	X	X	X		X	X		X		
Adopt only those sections that are listed below					X	X							X						
Chapter/Section																			
Note Under Title						X													
403.0	X		X				X	X											
403.1									X	X	X	X							
403.2 & subsections			X	X															
403.3			X	X															
403.3.1			X	X															
403.3.2	X						X	X											
403.3.3	X						X	X											
403.3.4 & subsections			X	X															
403.6			X																
403.7			X																
403.8			X	X															
408.2			X																
408.5 Exception 1					X														
408.6 Exception 3					X														
413.3									X	X	X	X							
415.1			X																
421.1					X														
422.2			†	†															
422.2.1 & Exception									X	X	X	X							
422.4			†	†															
422.5			†	†															
422.6																	X		
422.7																	X		
422.8																			
422.9														X					
Table A	X						X	X											
Table 422.1	X		X	X	X	X	X	X	X	X	X	X							
Table 422.1 Minimum Plumbing Facilities (Footnote-4)							X	X											
Table 4-2									X	X	X	X							
Table 4-3	X														X				
Table 4-4	X													X					

The state agency does not adopt sections identified by the following symbol: †

CHAPTER 4

PLUMBING FIXTURES AND FIXTURE FITTINGS

Note: *In addition the requirements of this chapter, which provide access to, or egress from, buildings or facilities where accessibility is required for applications listed in Section 109, of the California Building Code, regulated by the Division of the State Architect– Access Compliance shall also comply with Chapter 11A for public housing and Chapter 11B for public accommodations under authority cited by Gov. Code §4450 and in reference cited by Gov. Code §4450 through 4461, 12955.1 and H&SC §18949.1, 19952 through 19959.*

401.0 Materials – General Requirements.

401.1 Quality of Fixtures. Plumbing fixtures shall be constructed of dense, durable, non-absorbent materials and shall have smooth, impervious surfaces, free from unnecessary concealed fouling surfaces. Except as permitted elsewhere in this code, fixtures shall comply with the quality and design of nationally recognized applicable standards referenced in Table 1401.1.

401.2 Lead. Sheet lead shall be not less than the following:

For safe pans not less than 4 pounds per square foot (lb/ft^2) (19 kg/m^2) or 1/16 of an inch (1.6 mm) thick. (See Table 1401.1)

402.0 Installation.

402.1 Cleaning. Plumbing fixtures shall be installed in a manner to afford easy access for repairs and cleaning. Pipes from fixtures shall be run to the nearest wall.

402.2 Joints. Where a fixture comes in contact with the wall or floor, the joint between the fixture and the wall or floor shall be made watertight.

402.3 Securing Fixtures. Floor-outlet or floor-mounted fixtures shall be rigidly secured to the drainage connection and to the floor, where so designed, by screws or bolts of copper, brass, or other equally corrosion-resistant material.

402.4 Wall-Hung Fixtures. Wall-hung fixtures shall be rigidly supported by metal supporting members so that no strain is transmitted to the connections. Flush tanks and similar appurtenances shall be secured by approved non-corrosive screws or bolts.

402.5 Setting. Fixtures shall be set level and in proper alignment with reference to adjacent walls. No water closet or bidet shall be set closer than 15 inches (381 mm) from its center to a side wall or obstruction nor closer than 30 inches (762 mm) center to center to a similar fixture. The clear space in front of a water closet or bidet shall be not less than 24 inches (610 mm). No urinal shall be set closer than 12 inches (305 mm) from its center to a side wall or partition nor closer than 24 inches (610 mm) center to center.

Exception: The installation of paper dispensers or accessibility grab bars shall not be considered obstructions.

402.6 Flanged Fixture Connections. Fixture connections between drainage pipes and water closets, floor outlet service sinks and urinals shall be made by means of approved brass, hard lead, ABS, PVC, or iron flanges caulked, soldered, solvent cemented; rubber compression gaskets; or screwed to the drainage pipe. The connection shall be bolted with an approved gasket, washer, or setting compound between the fixture and the connection. The bottom of the flange shall be set on an approved firm base.

Wall-mounted water closet fixtures shall be securely bolted to an approved carrier fitting. The connecting pipe between the carrier fitting and the fixture shall be an approved material and designed to accommodate an adequately sized gasket. Gasket material shall be neoprene, felt, or similar approved types.

402.6.1 Closet Rings (Closet Flanges). Closet rings (closet flanges) for water closets or similar fixtures shall be of an approved type and shall be bronze, copper, hard lead, cast-iron, galvanized malleable iron, ABS, PVC, or other approved materials. Each such closet ring (closet flange) shall be approximately 7 inches (178 mm) in diameter and, where installed, shall, together with the soil pipe, present a 1½ inch (38 mm) wide flange or face to receive the fixture gasket or closet seal.

Caulked-on closet rings (closet flanges) shall be not less than ¼ of an inch (6.4 mm) thick and not less than 2 inches (51 mm) in overall depth.

Closet rings (closet flanges) shall be burned or soldered to lead bends or stubs, shall be caulked to cast-iron soil pipe, shall be solvent cemented to ABS and PVC, and shall be screwed or fastened in an approved manner to other materials.

Closet bends or stubs shall be cut off so as to present a smooth surface even with the top of the closet ring before rough inspection is called.

Closet rings (closet flanges) shall be adequately designed and secured to support fixtures connected thereto.

402.6.2 Securing Closet Flanges. Closet screws, bolts, washers, and similar fasteners shall be of brass, copper, or other listed, equally corrosion-resistant materials. Screws and bolts shall be of a size and number to properly support the fixture installed.

402.6.3 Securing Floor-Mounted, Back-Outlet Water Closet Bowls. Floor-mounted, back-outlet water closet bowls shall be set level with an angle of 90 degrees (1.57 rad) between the floor and wall at the centerline of the fixture outlet. The floor and wall shall have a flat mounting surface not less than 5 inches (127 mm) to the right and left of the fixture outlet centerline. The fixture shall be secured to the wall outlet flange or drainage connection and to the floor by corrosion-resistant screws or bolts. The closet flange shall be secured to a firm base.

Where floor-mounted, back-outlet water closets are used, the soil pipe shall be not less than 3 inches (80 mm) in diameter. Offset, eccentric, or reducing floor flanges shall not be used.

402.7 Accessible Plumbing Facilities. Where accessible facilities are required in applicable building regulations, the facilities shall be installed in accordance with those regulations. ***[HCD 1-AC]*** *For specific requirements regarding accommodations for persons with disabilities, see California Code of Regulations, Title 24, Part 2, Chapter 11A.*

402.8 Supply Fittings. The supply lines and fittings for every plumbing fixture shall be so installed as to prevent backflow in accordance with Chapter 6.

402.9 Installation. Water-conserving fixtures shall be installed in strict accordance with the manufacturer's installation instructions to maintain their rated performance.

402.10 Design and Installation of Plumbing Fixtures. Plumbing fixtures shall be installed such that fixture fittings shall be in accordance with the backflow prevention requirements of ASME A112.18.1/CSA B125.1. These requirements shall not be compromised by the designated fixture fitting mounting surface.

402.11 Slip Joint Connections. Fixtures having concealed slip joint connections shall be provided with an access panel or utility space not less than 12 inches (305 mm) in its least dimension and so arranged without obstructions as to make such connections accessible for inspection and repair.

402.12 Future Fixtures. Where provisions are made for the future installation of fixtures, those provided for shall be considered in determining the required sizes of drain pipes. Construction for future installations shall be terminated with a plugged fitting or fittings. Where the plugged fitting is at the point where the trap of a fixture is installed, the plumbing system for such fixture shall be complete and be in accordance with the plumbing requirements of this code.

403.0 Water-Conserving Fixtures and Fittings.

Note 1: [BSC, DSA-SS & DSA-SS/CC] *Flow rates for specified plumbing fixtures for mandatory nonresidential construction are contained in Chapter 5, Division 5.3 of the California Green Building Standards Code (Part 11, Title 24, California Code of Regulations - CALGreen). Scoping provisions applicable to nonresidential additions and alterations are contained in Section 301.3 of CALGreen.*

Note 2: [BSC] *On and after January 1, 2014, certain commercial real property, as defined in Civil Code Section 1101.3, shall have its noncompliant plumbing fixtures replaced with appropriate water-conserving plumbing fixtures under specific circumstances. See Civil Code Section 1101.1 et seq. for definitions, types of commercial real property affected, effective dates, circumstances necessitating replacement of noncompliant plumbing fixtures, and duties and responsibilities for ensuring compliance.*

Note 3: [HCD] *On and after January 1, 2014, residential buildings undergoing permitted alterations, additions or improvements shall replace noncompliant plumbing fixtures with water-conserving plumbing fixtures. Plumbing fixture replacement is required prior to issuance of a certificate of final completion, certificate of occupancy or final permit approval by the local building department. See Civil Code Section 1101.1, et seq. for the definition of a noncompliant plumbing fixture, types of buildings affected and other subsequent enactment dates.*

403.1 Flush Volumes. Flush volumes for low-consumption and water-saver water closets and urinals shall comply with applicable standards referenced in Table 1401.1. ***[OSHPD 1, 2, 3 & 4]*** *and Title 20, California Code of Regulations, Division 2, Chapter 4, Article 4, Section 1605.3 (i).*

403.2 Water Closets. Water closets, either flush tank, flushometer tank, or flushometer valve operated, shall have an average consumption not to exceed 1.6 gallons (6.0 Lpf) of water per flush.

403.2.1 Water Closets on or after July 1, 2011 [HCD 1 & HCD 2] *Water closets, either flush tank, flushometer tank, or flushometer valve operated installed on or after July 1, 2011, shall have an effective flush volume in compliance with the following:*

(1) Single Flush Toilets - The effective flush volume shall not exceed 1.28 gallons (4.8 liters) when tested in accordance with ASME A112.19.2, Standard for Vitreous China Plumbing Fixtures and Hydraulic Fixtures Requirements for Water Closets and Urinals

(2) Dual Flush Toilets - The effective flush volume shall not exceed 1.28 gallons (4.8 liters) when tested in accordance with ASME A112.19.2, Standard for Vitreous China Plumbing Fixtures and Hydraulic Fixtures Requirements for Water Closets and Urinals, and ASME A112.19.14, Standard for Six-Liter Water Closets Equipped with a Dual Flushing Device.

403.2.1.1 Performance [HCD 1 & HCD 2] *Water closets installed on or after July 2, 2011, shall meet or exceed the minimum performance criteria developed for certification of high-efficiency toilets under the WaterSense program sponsored by the U.S. Environmental Protection Agency (EPA).*

403.3 Urinals. Urinals shall have an average water consumption not to exceed *0.5* gallon*s* (*1.89* L) of water per flush.

403.3.1 [HCD] *On or after January 1, 2016, wall mounted urinals shall have an average water consumption not to exceed 0.125 gallons (0.47 L) of water per flush. Other urinals shall have an average water consumption not to exceed 0.5 gallons (1.89 L) of water per flush.*

403.3.2 Wall Mounted Urinals. [BSC, DSA-SS & DSA-SS/CC] *The effective flush volume of wall mounted urinals shall not exceed 0.125 gallons per flush in compliance with Chapter 5, Division 5.3. of the California Green Building Standards Code (CALGreen).*

403.3.3 Floor Mounted Urinals. [BSC, DSA-SS & DSA-SS/CC] *The effective flush volume of floor mounted or other urinals shall not exceed 0.5 gallons per flush in compliance with Chapter 5, Division 5.3. of the California Green Building Standards Code (CALGreen).*

403.3.4 Nonwater Urinals. ***[Not adopted for OSHPD 1, 2, 3, & 4]*** Nonwater urinals shall be listed and comply with the applicable standards referenced in Table 1401.1. Nonwater urinals shall have a barrier liquid sealant to maintain a trap seal. Nonwater urinals shall permit the uninhibited flow of waste through the urinal to the sanitary drainage system. Nonwater urinals shall be cleaned and maintained in accordance with the manufacturer's instructions after installation. Where nonwater urinals are installed they shall have a water distribution line roughin to the urinal location to allow for the installation of an approved backflow prevention device in the event of a retrofit. *For additional information, see Health and Safety Code Section 17921.4.*

403.3.4.1 Nonwater Urinal Drainage Connections. *Where nonwater urinals are installed, not less than one water supplied fixture rated at not less than 1 drainage fixture unit (DFU) shall be installed upstream on the same drain line to facilitate drain line flow and rinsing.*

403.4 Metered Faucets. Self-closing or self-closing metering faucets shall be installed on lavatories intended to serve the transient public, such as those in, but not limited to, service stations, train stations, airports, restaurants, and convention halls. Metered faucets shall deliver a maximum of 0.25 gallons (0.95 L) of water per use.

403.5 Pre-Rinse Spray Valve. Commercial food service prerinse spray valves shall have a maximum flow rate of 1.6 gallons per minute (gpm) at 60 pounds-force per square inch (psi) (6.0 L/m at 414 kPa) in accordance with ASME A112.18.1/CSA B125.1 and shall be equipped with an integral automatic shutoff.

403.6 Kitchen Faucets. [HCD 1] *The maximum flow rate of kitchen faucets shall not exceed 1.8 gallons (6.81 L) per minute at 60 psi. Kitchen faucets may temporarily increase the flow above the maximum rate, but not to exceed 2.2 gallons (8.32 L) per minute at 60 psi, and must default to a maximum flow rate of 1.8 gallons (6.81 L) per minute at 60 psi.*

Note: *Where faucets meeting the maximum flow rate of 1.8 gpm (6.81 L) are unavailable, aerators or other means may be used to achieve reduction.*

403.7 Residential Lavatory Faucets. [HCD 1] *On or after July 1, 2016, the maximum flow rate of residential lavatory faucets shall not exceed 1.2 gallons (4.54 L) per minute at 60 psi. The minimum flow rate of residential lavatory faucets shall not be less than 0.8 gallons (3.03 L) per minute at 20 psi.*

403.8 Lavatory Faucets in Common and Public Use Areas. [HCD 1 & HCD 2] *The maximum flow rate of lavatory faucets, installed in common and public use areas (outside of dwellings or sleeping units) in residential buildings, shall not exceed 0.5 gallons (1.89 L) per minute at 60 psi.*

404.0 Overflows.

404.1 General. Where a fixture is provided with an overflow, the waste shall be so arranged that the standing water in the fixture shall not rise in the overflow where the stopper is closed or remain in the overflow where the fixture is empty. The overflow pipe from a fixture shall be connected on the house or inlet side of the fixture trap, except that overflow on flush tanks shall be permitted to discharge into the water closets or urinals served by them, but it shall be unlawful to connect such overflows with any other part of the drainage system.

405.0 Strainers and Connections.

405.1 Strainers. Plumbing fixtures, other than water closets and urinals, shall be equipped with approved strainers having an approved waterway area. Strainers serving shower drains shall have a waterway equivalent to the area of the tailpiece.

405.2 Continuous Wastes. Continuous wastes and fixture tailpieces shall be constructed from the materials specified in Section 701.1 for drainage piping, provided, however, that such connections where exposed or accessible shall be permitted to be of seamless drawn brass not less than No. 20 B & S Gauge (0.032 inches) (0.8 mm). Each such tailpiece, continuous waste, or waste and overflow shall be not less than 1½ inches (40 mm) O.D. for sinks, dishwashers, laundry tubs, bathtubs, urinals, and similar fixtures, and not less than 1¼ inches (32 mm) for lavatories, drinking fountains, and similar small fixtures.

406.0 Prohibited Fixtures.

406.1 Prohibited Water Closets. Water closets having an invisible seal or an unventilated space or having walls which are not thoroughly washed at each discharge shall be prohibited. A water closet that might permit siphonage of the contents of the bowl back into the tank shall be prohibited.

406.2 Prohibited Urinals. Trough urinals and urinals with an invisible seal shall be prohibited.

406.3 Miscellaneous Fixtures. Fixed wooden, or tile wash trays or sinks for domestic use shall not be installed in a building designed or used for human habitation. No sheet metal-lined wooden bathtub shall be installed or reconnected. No dry or chemical closet (toilet) shall be installed in a building used for human habitation, unless first approved by the Health Officer.

407.0 Special Fixtures and Specialties.

407.1 Water and Waste Connections. Baptisteries, ornamental and lily ponds, aquaria, ornamental fountain basins, and similar fixtures and specialties requiring water, waste connections, or both shall be submitted for approval to the Authority Having Jurisdiction prior to installation.

407.2 Special Use Sinks. Restaurant kitchen and other special use sinks shall be permitted to be made of approved-type bonderized and galvanized sheet steel of not less than No. 16 U.S. gauge (0.0625 inches) (1.6 mm). Sheet-metal plumbing fixtures shall be adequately designed, constructed, and braced in an approved manner to accomplish their intended purpose.

407.3 Special Use Fixtures. Special use fixtures shall be made of one of the following:

(1) Soapstone
(2) Chemical stoneware
(3) Copper-based alloy
(4) Nickel-based alloy
(5) Corrosion-resistant steel
(6) Other materials suited for the intended use of the fixture

407.4 Zinc Alloy Components. Zinc alloy components shall comply with applicable nationally recognized standards and shall be used in accordance with their listing.

408.0 Showers.

408.1 Application. Manufactured shower receptors shall comply with the applicable standards referenced in Table 1401.1.

408.2 Water Consumption. ***[HCD 1]*** *Showerheads shall have a maximum flow rate of 2.0 gallons (7.57 L) per minute measured at 80 psi and must comply with Division 4.3 of the California Green Building Standards Code (CALGreen).*

408.3 Individual Shower and Tub-Shower Combination Control Valves. Showers and tub-shower combinations shall be provided with individual control valves of the pressure balance, thermostatic, or combination pressure balance/thermostatic mixing valve type that provide scald and thermal shock protection for the rated flow rate of the installed showerhead. These valves shall be installed at the point of use and in accordance with ASSE 1016 or ASME A112.18.1/CSA B125.1. Gang showers, where supplied with a single temperature-controlled water supply pipe, shall be controlled by a mixing valve that is in accordance with ASSE 1069. Handle position stops shall be provided on such valves and shall be adjusted per the manufacturer's instructions to deliver a maximum mixed water setting of 120°F (49°C). Water heater thermostats shall not be considered a suitable control for meeting this provision.

408.4 Waste Outlet. Showers shall have a waste outlet and fixture tailpiece not less than 2 inches (50 mm) in diameter. Fixture tailpieces shall be constructed from the materials specified in Section 701.1 for drainage piping. Strainers serving shower drains shall have a waterway at least equivalent to the area of the tailpiece.

408.5 Finished Curb or Threshold. Where a shower receptor has a finished dam, curb, or threshold it shall be not less than 1 inch (25.4 mm) lower than the sides and back of such receptor. In no case shall a dam or threshold be less than 2 inches (51 mm) or exceeding 9 inches (229 mm) in depth where measured from the top of the dam or threshold to the top of the drain. Each such receptor shall be provided with an integral nailing flange to be located where the receptor meets the vertical surface of the finished interior of the shower compartment. The flange shall be watertight and extend vertically not less than 1 inch (25.4 mm) above the top of the sides of the receptor. The finished floor of the receptor shall slope uniformly from the sides towards the drain not less than ¼ inch per foot (20.8 mm/m), nor more than ½ inch per foot (41.8 mm/m).

Thresholds shall be of sufficient width to accommodate a minimum 22 inch (559 mm) door. Shower doors shall open so as to maintain not less than a 22 inch (559 mm) unobstructed opening for egress.

Exceptions:

(1) Showers that are designed to be in accordance with the accessibility standards listed in Table 1401.1. ***[HCD 1-AC]*** *Specific requirements regarding accommodations for persons with disabilities are contained in California Code of Regulations, Title 24, Part 2, Chapter 11A. Table 1401.1 does not contain the correct accessibility standards for use in California.*

(2) A cast-iron shower receptor flange shall be not less than 0.3 of an inch (7.62 mm) in height.

(3) For flanges not used as a means of securing, the sealing flange shall be not less than 0.3 of an inch (7.62 mm) in height.

408.6 Shower Compartments. Shower compartments, regardless of shape, shall have a minimum finished interior of 1024 square inches (0.6606 m^2) and shall also be capable of encompassing a 30 inch (762 mm) circle. The minimum required area and dimensions shall be measured at a height equal to the top of the threshold and at a point tangent to its centerline. The area and dimensions shall be maintained to a point of not less than 70 inches (1778 mm) above the shower drain outlet with no protrusions other than the fixture valve or valves, shower head, soap dishes, shelves, and safety grab bars, or rails. Fold-down seats in accessible shower stalls shall be permitted to protrude into the 30 inch (762 mm) circle.

Exceptions:

(1) Showers that are designed to comply with *Chapter 11A of the California Building Code*.

(2) The minimum required area and dimension shall not apply for a shower receptor having overall dimensions of not less than 30 inches (762 mm) in width and 60 inches (1524 mm) in length.

(3) ***[HCD 1-AC]*** *Specific requirements regarding accommodations for persons with disabilities are contained in California Code of Regulations, Title 24, Part 2, Chapter 11A. ICC A117.1, Standard for Accessible and Usable Buildings and Facilities, does not contain the correct accessibility standards for use in California.*

408.7 Lining for Showers and Receptors. Shower receptors built on-site shall be watertight and shall be constructed from approved-type dense, nonabsorbent, and noncorrosive materials. Each such receptor shall be adequately reinforced, shall be provided with an approved flanged floor drain designed to make a watertight joint in the floor, and shall have smooth, impervious, and durable surfaces.

Shower receptors shall have the subfloor and rough side of walls to a height of not less than 3 inches (76 mm) above the top of the finished dam or threshold shall be first lined with sheet plastic, lead, or copper, or shall be lined with other durable and watertight materials. Showers that are provided with a built in place, permanent seat or seating area that is located within the shower enclosure, shall be first lined with sheet plastic, lead, copper, or shall be lined with other durable and watertight materials that extend not less than 3 inches (76 mm) above horizontal surfaces of the seat or the seating area.

Lining materials shall be pitched ¼ inch per foot (20.8 mm/m) to weep holes in the subdrain of a smooth and solidly formed subbase. Such lining materials shall extend upward on the rough jambs of the shower opening to a point not less than 3 inches (76 mm) above the horizontal surfaces of the seat or the seating area, the top of the finished dam or threshold and shall extend outward over the top of the permanent seat, permanent seating area, or rough threshold and be turned over

and fastened on the outside face of both the permanent seat, permanent seating area, or rough threshold and the jambs.

Nonmetallic shower subpans or linings shall be permitted to be built up on the job site of not less than three layers of standard grade 15 pound (6.8 kg) asphalt-impregnated roofing felt. The bottom layer shall be fitted to the formed subbase and each succeeding layer thoroughly hot-mopped to that below. Corners shall be carefully fitted and shall be made strong and watertight by folding or lapping, and each corner shall be reinforced with suitable webbing hot-mopped in place.

Folds, laps, and reinforcing webbing shall extend not less than 4 inches (102 mm) in all directions from the corner, and webbing shall be of approved type and mesh, producing a tensile strength of not less than 50 lb/ft^2 (244 kg/m^2) in either direction. Nonmetallic shower subpans or linings shall be permitted to consist of multilayers of other approved equivalent materials suitably reinforced and carefully fitted in place on the job site as elsewhere required in this section.

Linings shall be properly recessed and fastened to approved backing so as not to occupy the space required for the wall covering, and shall not be nailed or perforated at a point that is less than 1 inch (25.4 mm) above the finished dam or threshold. An approved-type subdrain shall be installed with a shower subpan or lining. Each such subdrain shall be of the type that sets flush with the subbase and shall be equipped with a clamping ring or other device to make a tight connection between the lining and the drain. The subdrain shall have weep holes into the waste line. The weep holes located in the subdrain clamping ring shall be protected from clogging.

Shower lining materials shall comply with approved standards acceptable to the Authority Having Jurisdiction. Lead and copper subpans or linings shall be insulated from conducting substances other than their connecting drain by 15 pound (6.8 kg) asphalt felt or its equivalent, and no lead pan or liner shall be constructed of material weighing less than 4 lb/ft^2 (19 kg/m^2). Copper pans or liners shall be not less than No. 24 B & S Gauge (0.02 inches) (0.51 mm). Joints in lead pans or liners shall be burned. Joints in copper pans or liners shall be soldered or brazed. Plastic pans shall not be coated with asphalt-based materials.

408.7.1 Tests for Shower Receptors. Shower receptors shall be tested for watertightness by filling with water to the level of the rough threshold. The test plug shall be so placed that both upper and under sides of the subpan shall be subjected to the test at the point where it is clamped to the drain.

408.8 Public Shower Floors. Floors of public shower rooms shall have a nonskid surface and shall be drained in such a manner that wastewater from one bather shall not pass over areas occupied by other bathers. Gutters in public or gang shower rooms shall have rounded corners for easy cleaning and shall be sloped not less than 2 percent toward drains. Drains in gutters shall be spaced at a maximum of 8 feet (2438 mm) from sidewalls nor more than 16 feet (4877 mm) apart.

408.9 Location of Valves and Heads. Control valves and showerheads shall be located on the sidewall of shower compartments or otherwise arranged so that the showerhead does not discharge directly at the entrance to the compartment so that the bather can adjust the valves prior to stepping into the shower spray.

408.10 Water Supply Riser. A water supply riser from the shower valve to the showerhead outlet, whether exposed or not, shall be securely attached to the structure.

409.0 Bathtubs and Whirlpool Bathtubs.

409.1 Application. Bathtubs and whirlpool bathtubs shall comply with the applicable standards referenced in Table 1401.1. Pressure sealed doors within a bathtub or whirlpool bathtub enclosure shall comply with the applicable standards referenced in Table 1401.1.

409.2 Waste Outlet. Bathtubs and whirlpool bathtubs shall be provided with a waste outlet and tailpiece not less than 1½ inches (40 mm) in diameter. Fixture tailpieces shall be constructed of materials in accordance with Section 701.1. Waste outlets shall be provided with an approved stopper or strainer.

409.3 Overflow. Overflows shall be installed in accordance with Section 404.1.

409.4 Limitation of Hot Water in Bathtubs and Whirlpool Bathtubs. The maximum hot water temperature discharging from the bathtub and whirlpool bathtub filler shall be limited to 120°F (49°C) by a device that is in accordance with ASSE 1070 or CSA B125.3. Water heater thermostats shall not be considered a control for meeting this provision.

409.5 Backflow Protection. The water supply to a bathtub and whirlpool bathtub filler valve shall be protected by an air gap or in accordance with Section 417.0.

409.6 Installation and Access. Bathtubs and whirlpool bathtubs shall be installed in accordance with the manufacturer's installation instructions. Access openings shall be of size and opening to permit the removal and replacement of the circulation pump.

Whirlpool pump access located in the crawl space shall be located not more than 20 feet (6096 mm) from an access door, trap door, or crawl hole.

The circulation pump shall be located above the crown weir of the trap.

The pump and the circulation piping shall be self-draining to minimize water retention. Suction fittings on whirlpool bathtubs shall be listed in accordance with ASME A112.19.7.

410.0 Bidets.

410.1 Application. Bidets shall comply with the applicable standards referenced in Table 1401.1.

410.2 Backflow Protection. The water supply to the bidet shall be protected by an air gap or in accordance with Section 603.3.2, Section 603.3.5, or Section 603.3.6.

410.3 Limitation of Water Temperature in Bidets. The maximum hot water temperature discharging from a bidet shall be

limited to 110°F (43°C) by a device that is in accordance with ASSE 1070 or CSA B125.3. Water heater thermostats shall not be considered a control for meeting this provision.

411.0 Water Closets.

411.1 Water Closet Bowls. Water closet bowls for public use shall be of the elongated type. In nurseries, schools, and other similar places where plumbing fixtures are provided for the use of children less than 6 years of age, water closets shall be of a size and height suitable for children's use. Water closets shall be equipped with seats in accordance with Section 411.2 through Section 411.2.2.

411.2 Water Closet Seats. Water closet seats shall be of smooth, non-absorbent material. Seats for public use shall comply with the applicable standards referenced in Table 1401.1.

411.2.1 Type. Water closet seats, for public use, shall be of the elongated type and either of the open front type or have an automatic seat cover dispenser.

411.2.2 Size. Water closet seats shall be properly sized for the water closet bowl type.

412.0 Urinals.

412.1 General. A water supply to a urinal shall be protected by an approved-type vacuum breaker or other approved backflow prevention device in accordance with Section 603.5.

413.0 Flushing Devices for Water Closets and Urinals.

413.1 Application. Flushometer valves, flushometer tanks, or flush tanks shall comply with the applicable standards referenced in Table 1401.1.

413.2 Flushing Devices Required. Each water closet, urinal, clinic sink, or other plumbing fixture that depends on trap siphonage to discharge its waste contents shall be provided with a flushometer valve, flushometer tank, or flush tank designed and installed so as to supply water in sufficient quantity and rate of flow to flush the contents of the fixture to which it is connected, to cleanse the fixture, and to refill the fixture trap, without excessive water use. Flushing devices shall meet antisiphon requirements in accordance with Section 603.5.

413.3 Flushometer Valves. No manually controlled flushometer valve shall be used to flush more than one urinal, and each such urinal flushometer valve shall be an approved, self-closing type discharging a predetermined quantity of water. Flushometers shall be installed so that they will be accessible for repair. Flushometer valves shall not be used where the water pressure is insufficient to properly operate them. Where the valve is operated, it shall complete the cycle of operation automatically, opening fully, and closing positively under the line water pressure. Each flushometer shall be provided with a means for regulating the flow through it. ***[OSHPD 1, 2, 3, & 4]*** *Sensor operated flush valves shall be capable of functioning during loss of normal power.*

413.4 Water Supply for Flush Tanks. An adequate quantity of water shall be provided to flush and clean the fixture served. The water supply for flushing tanks and flushometer tanks equipped for manual flushing shall be controlled by a float valve or other automatic device designed to refill the tank after each discharge and to completely shut off the water flow to the tank where the tank is filled to operational capacity. Provision shall be made to automatically supply water to the fixture so as to refill the trap seal after each flushing.

413.5 Overflows in Flush Tanks. Flush tanks shall be provided with overflows discharging into the water closet or urinal connected thereto. Overflows supplied as original parts with the fixture shall be of sufficient size to prevent tank flooding at the maximum rate at which the tank is supplied with water under normal operating conditions and where installed in accordance with the manufacturer's installation instructions.

414.0 Dishwashing Machines.

414.1 Application. Domestic or commercial dishwashing machines shall comply with the applicable standards referenced in Table 1401.1.

414.2 Backflow Protection. The water supply connection to a commercial dishwashing machine shall be protected by an air gap or a backflow prevention device in accordance with Section 603.3.2, Section 603.3.5, or Section 603.3.6.

414.3 Drainage Connection. Domestic dishwashing machines shall discharge indirectly through an air gap fitting in accordance with Section 807.4 into a waste receptor, a wye branch fitting on the tailpiece of a kitchen sink, or dishwasher connection of a food waste grinder. Commercial dishwashing machines shall discharge indirectly through an air gap or direct connection in accordance with Section 704.3 with floor drain protection.

415.0 Drinking Fountains.

415.1 Application. Drinking fountains shall be self-closing and comply with NSF 61 and to the applicable standards referenced in Table 1401.1. ***[HCD 1]*** *Drinking fountains shall be installed and so regulated that a jet of water extending at least 2 inches (51 mm) in height from the water orifice shall be constantly available. The orifice shall not be accessible to the mouth of the drinker nor subject to immersion.*

415.2 Where Required. Where food is consumed indoors, water stations shall be permitted to be substituted for drinking fountains. Drinking fountains shall not be required for an occupant load of 30 or less.

415.3 Drainage Connection. Drinking fountains shall be permitted to discharge directly into the drainage system or indirectly through an air break in accordance with Section 809.1.

415.4 Location. Drinking fountains shall not be installed in toilet rooms.

416.0 Emergency Eyewash and Shower Equipment.

416.1 Application. Emergency eyewash and shower equipment shall comply with ISEA Z358.1.

416.2 Water Supply. Emergency eyewash and shower equipment shall not be limited in the water supply flow rates. Flow rate, discharge pattern, and temperature of flushing fluids

shall be provided in accordance with ISEA Z358.1 based on the hazardous material.

416.3 Installation. Emergency eyewash and shower equipment shall be installed in accordance with the manufacturer's installation instructions.

416.4 Location. Emergency eyewash and shower equipment shall be located on the same level as the hazard and accessible for immediate use. The path of travel shall be free of obstructions and shall be clearly identified with signage.

416.5 Drain. A drain shall not be required for emergency eyewash or shower equipment. Where a drain is provided, the discharge shall be in accordance with Section 811.0.

417.0 Faucets and Fixture Fittings.

417.1 Application. Faucets and fixture fittings shall comply with ASME A112.18.1/CSA B125.1. Fixture fittings covered under the scope of NSF 61 shall be in accordance with the requirements of NSF 61.

417.2 Deck Mounted Bath/Shower Valves. Deck mounted bath/shower transfer valves with integral backflow protection shall comply with ASME A112.18.7. This shall include handheld showers and other bathing appliances mounted on the deck of bathtubs or other bathing appliances that incorporate a hose or pull out feature.

417.3 Handheld Showers. Handheld showers shall comply with ASME A112.18.1/CSA B125.1. Handheld showers with integral backflow protection shall comply with ASME A112.18.1/CSA B125.1 or shall have a backflow prevention device that is in accordance with ASME A112.18.3.

417.4 Faucets and Fixture Fittings with Hose Connected Outlets. Faucets and fixture fittings with pull out spout shall comply with ASME A112.18.1/CSA B125.1. Faucets and fixture fittings with pull out spouts with integral backflow protection shall comply with ASME A112.18.1/CSA B125.1 or shall have a backflow preventer device that is in accordance with ASME A112.18.3.

417.5 Separate Controls for Hot and Cold Water. Where two separate handles control the hot and cold water, the left-hand control of the faucet where facing the fixture fitting outlet shall control the hot water. Faucets and diverter shall be connected to the water distribution system so that hot water corresponds to the left side of the fittings.

Single-handle mixing valves shall have the flow of hot water correspond to the markings on the fitting.

418.0 Floor Drains.

418.1 Application. Floor drains shall comply with the applicable standards referenced in Table 1401.1.

418.2 Strainer. Floor drains shall be considered plumbing fixtures, and each such drain shall be provided with an approved-type strainer having a waterway equivalent to the area of the tailpiece. Floor drains shall be of an approved type and shall provide a watertight joint in the floor.

418.3 Location of Floor Drains. Floor drains shall be installed in the following areas:

(1) Toilet rooms containing two or more water closets or a combination of one water closet and one urinal, except in a dwelling unit.

(2) Commercial kitchens and in accordance with Section 704.3.

(3) Laundry rooms in commercial buildings and common laundry facilities in multi-family dwelling buildings.

418.4 Food Storage Areas. Where drains are provided in storerooms, walk-in freezers, walk-in coolers, refrigerated equipment, or other locations where food is stored, such drains shall have indirect waste piping. Separate waste pipes shall be run from each food storage area, each with an indirect connection to the building sanitary drainage system. Traps shall be provided in accordance with Section 801.2.2 of this code and shall be vented.

Indirect drains shall be permitted to be located in freezers or other spaces where freezing temperatures are maintained, provided that traps, where supplied, shall be located where the seal will not freeze. Otherwise, the floor of the freezer shall be sloped to a floor drain located outside of the storage compartment.

418.5 Floor Slope. Floors shall be sloped to floor drains. ←

419.0 Food Waste Disposal Units.

419.1 Application. Food waste disposal units shall comply with the applicable standards referenced in Table 1401.1.

419.2 Drainage Connection. Approved wye or other directional-type branch fittings shall be installed in continuous wastes connecting or receiving the discharge from a food waste disposal unit. No dishwasher drain shall be connected to a sink tailpiece, continuous waste, or trap on the discharge side of a food waste disposal unit.

419.3 Water Supply. A cold water supply shall be provided for food waste disposal units. Such connection to the water supply shall be protected by an air gap or backflow prevention device in accordance with Section 603.2.

420.0 Sinks.

420.1 Application. Sinks shall comply with the applicable standards referenced in Table 1401.1.

420.2 Water Consumption. Sink faucets shall have a maximum flow rate of not more than 2.2 gpm at 60 psi (8.3 L/m at 414 kPa) in accordance with ASME A112.18.1/CSA B125.1.

Exceptions:

(1) Clinical sinks

(2) Laundry trays

(3) Service sinks

420.3 Waste Outlet. Kitchen and laundry sinks shall have a waste outlet and fixture tailpiece not less than 1½ inches (40 mm) in diameter. Service sinks shall have a waste outlet and fixture tailpiece not less than 2 inches (50 mm) in diameter.

Fixture tailpieces shall be constructed from the materials specified in Section 701.1 for drainage piping, provided, however, that such connections where exposed or accessible shall be permitted to be of seamless drawn brass not less than No. 20 B & S Gauge (0.032 inches) (0.81 mm). Waste outlets shall be provided with an approved strainer.

421.0 Fixtures and Fixture Fittings for Persons with Disabilities.

421.1 General. Plumbing fixtures and fixture fittings for persons with disabilities shall comply with the appropriate standards referenced in Table 1401.1 of this code. ***[HCD 1-AC]*** *Specific requirements regarding accommodations for persons with disabilities are contained in California Code of Regulations, Title 24, Part 2, Chapter 11A. Table 1401.1 does not contain the correct accessibility standards for use in California.*

421.2 Limitation of Hot Water Temperature for Public Lavatories. Hot water delivered from public-use lavatories shall be limited to a maximum temperature of 120°F (49°C) by a device that is in accordance with ASSE 1070 or CSA B125.3. The water heater thermostat shall not be considered a control for meeting this provision.

422.0 Minimum Number of Required Fixtures.

422.1 Fixture Count. Plumbing fixtures shall be provided for the type of building occupancy and in the minimum number shown in Table 422.1 ***[OSHPD 1, 2, 3 & 4]*** *and Table 4-2*. The total occupant load and occupancy classification shall be determined in accordance with *Occupant Load Factor Table A*. Occupancy classification not shown in Table 422.1 shall be considered separately by the Authority Having Jurisdiction.

The minimum number of fixtures shall be calculated at 50 percent male and 50 percent female based on the total occupant load. Where information submitted indicates a difference in distribution of the sexes such information shall be used in order to determine the number of fixtures for each sex. Once the occupancy load and occupancy are determined, Table 422.1 shall be applied to determine the minimum number of plumbing fixtures required. Where applying the fixture ratios in Table 422.1 results in fractional numbers, such numbers shall be rounded to the next whole number. For multiple occupancies, fractional numbers shall be first summed and then rounded to the next whole number.

422.1.1 Family or Assisted-Use Toilet and Bathing Facilities. Where family or assisted-use toilet and bathing rooms are required, in applicable building regulations, the facilities shall be installed in accordance with those regulations.

422.1.2 [DSA-AS] *Effective January 1, 1990, in new construction and those existing facilities which occupancy type are listed in Tables 422.1 and 4-4 for public use, which apply for permit to undertake construction, structural alterations, repairs or improvement which exceed 50 percent of the square footage of the entire facility, shall install water closets, urinals, lavatories and drinking fountains as stipulated in Tables 422.1 and 4-4 for public use. Community and/or municipal parks with a bleacher capacity not exceeding 500 seats shall be exempt from the requirements of this section and Tables 422.1 and 4-4. Each bathroom shall comply with Part 2, Chapter 11A and 11B of the California Building Code.*

422.2 Separate Facilities. Separate toilet facilities shall be provided for each sex.

Exceptions:

(1) Residential installations.

(2) In occupancies with a total occupant load of 10 or less, including customers and employees, one toilet facility, designed for use by no more than one person at a time, shall be permitted for use by both sexes.

(3) In business and mercantile occupancies with a total occupant load of 50 or less including customers and employees, one toilet facility, designed for use by no more than one person at a time, shall be permitted for use by both sexes.

422.2.1 [OSHPD 1, 2, 3 & 4] *Separate toilet facilities shall be provided for the use of patients, staff personnel and visitors.*

Exception for Primary Care Clinics only: *Where a facility contains no more than three examination and/or treatment rooms, the patient toilet shall be permitted to serve waiting areas.*

422.3 Fixture Requirements for Special Occupancies. Additional fixtures shall be permitted to be required where unusual environmental conditions or referenced activities are encountered. In food preparation areas, fixture requirements shall be permitted to be dictated by health codes.

422.4 Toilet Facilities Serving Employees and Customers. Each building or structure shall be provided with toilet facilities for employees and customers. Requirements for customers and employees shall be permitted to be met with a single set of restrooms accessible to both groups.

Required toilet facilities for employees and customers located in shopping malls or centers shall be permitted to be met by providing a centrally located toilet facility accessible to several stores. The maximum travel distance from entry to any store to the toilet facility shall not exceed 300 feet (91 440 mm).

Required toilet facilities for employees and customers in other than shopping malls or centers shall have a maximum travel distance not to exceed 500 feet (152.4 m).

422.4.1 Access to Toilet Facilities. In multi-story buildings, accessibility to the required toilet facilities shall not exceed one vertical story. Access to the required toilet facilities for customers shall not pass through areas designated as for employee use only such as kitchens, food preparation areas, storage rooms, closets, or similar spaces. Toilet facilities accessible only to private offices shall not be counted to determine compliance with this section.

422.5 Toilet Facilities for Workers. Toilet facilities shall be provided and maintained in a sanitary condition for the use of workers during construction.

422.6 [CA] Cosmetology. *Each school shall provide public toilet rooms for each sex on the licensed premises in accordance with the California Plumbing Code, Table 422.1.*

422.7 [CA] Cosmetology Establishments. *Each establishment where hairdressing services are performed shall provide at least one public toilet room located on the premises in accordance with the California Plumbing Code, Table 422.1.*

422.8 [DHS] Commissaries Serving Mobile Food Preparation Units. *Commissaries serving mobile food preparation units shall have at least one hose bib. The hose bib shall be supplied with hot and cold water and be provided with a single spout, a backflow-preventer device and shall be located on the premises of the establishment.*

422.9 [DPH] Employee Lavatories in Food Establishments. *Employee lavatories installed in food establishments shall be equipped with an approved single spout capable of providing tempered (100ºF - 115ºF) (37.8ºC - 46.1ºC) running water.*

Note: *This requirement applies only to commissaries serving mobile food preparation units.*

TABLE 422.1
MINIMUM PLUMBING FACILITIES[1]

Each building shall be provided with sanitary facilities, including provisions for persons with disabilities as prescribed by the Department Having Jurisdiction[4]. Table 422.1 applies to new buildings, additions to a building, and changes of occupancy or type in an existing building resulting in increased occupant load.

For requirements for persons with disabilities, Chapter 11A or 11B of the California Building Code shall be used.

*The total occupant load shall be determined in accordance with the **[BSC, DSA-SS & DSA-SS/CC]** Occupant Load Factor Table A.*

Exceptions:

*(1) **[HCD 1-AC & HCD 2]** For applications listed in Sections 1.8.2.1.2 and 1.8.2.1.3 regulated by the Department of Housing and Community Development, each building shall be provided with sanitary facilities, including provisions for persons with disabilities as prescribed by the Department. Covered multifamily dwellings required to be accessible to persons with disabilities shall comply with California Code of Regulations, Title 24, Part 2, Chapter 11A. Permanent buildings in mobilehome parks and special occupancy parks required to be accessible by persons with disabilities, shall comply with California Code of Regulations, Title 24, Part 2, Chapter 11B.*

*(2) **[HCD 1]** For limited density owner-built rural dwelling sanitary facilities, the type, design and number of facilities as required and approved by the local health official shall be provided to the dwelling sites. It shall not be required that such facilities be located within the dwelling.*

TYPE OF OCCUPANCY[2]	WATER CLOSETS (FIXTURES PER PERSON)[3]		URINALS (FIXTURES PER PERSON)	LAVATORIES (FIXTURES PER PERSON)		BATHTUBS OR SHOWERS (FIXTURES PER PERSON)	DRINKING FOUNTAINS/ FACILITIES (FIXTURES PER PERSON)	OTHER
A-1 Assembly occupancy (fixed or permanent seating)- theatres, concert halls and auditoriums	Male 1: 1-100 2: 101-200 3: 201-400	Female 1: 1-25 2: 26-50 3: 51-100 4: 101-200 6: 201-300 8: 301-400	Male 1: 1-200 2: 201-300 3: 301-400 4: 401-600	Male 1: 1-200 2: 201-400 3: 401-600 4: 601-750	Female 1: 1-100 2: 101-200 4: 201-300 5: 301-500 6: 501-750	—	1: 1-250 2: 251-500 3: 501-750	1 service sink or laundry tray
	Over 400, add 1 fixture for each additional 500 males and 1 fixture for each additional 125 females.		Over 600, add 1 fixture for each additional 300 males.	Over 750, add 1 fixture for each additional 250 males and 1 fixture for each additional 200 females.			Over 750, add 1 fixture for each additional 500 persons.	
A-2 Assembly occupancy- restaurants, pubs, lounges, night clubs and banquet halls	Male 1: 1-50 2: 51-150 3: 151-300 4: 301-400	Female 1: 1-25 2: 26-50 3: 51-100 4: 101-200 6: 201-300 8: 301-400	Male 1: 1-200 2: 201-300 3: 301-400 4: 401-600	Male 1: 1-150 2: 151-200 3: 201-400	Female 1: 1-150 2: 151-200 4: 201-400	—	1: 1-250 2: 251-500 3: 501-750	1 service sink or laundry tray
	Over 400, add 1 fixture for each additional 250 males and 1 fixture for each 125 females.		Over 600, add 1 fixture for each additional 300 males.	Over 400, add 1 fixture for each additional 250 males and 1 fixture for each additional 200 females.			Over 750, add 1 fixture for each additional 500 persons.	
A-3 Assembly occupancy (typical without fixed or permanent seating)- arcades, places of worship, museums, libraries, lecture halls, gymnasiums (without spectator seating), indoor pools (without spectator seating)	Male 1: 1-100 2: 101-200 3: 201-400	Female 1: 1-25 2: 26-50 3: 51-100 4: 101-200 6: 201-300 8: 301-400	Male 1: 1-100 2: 101-200 3: 201-400 4: 401-600	Male 1: 1-200 2: 201-400 3: 401-600 4: 601-750	Female 1: 1-100 2: 101-200 4: 201-300 5: 301-500 6: 501-750	—	1: 1-250 2: 251-500 3: 501-750	1 service sink or laundry tray
	Over 400, add 1 fixture for each additional 500 males and 1 fixture for each additional 125 females.		Over 600, add 1 fixture for each additional 300 males.	Over 750, add 1 fixture for each additional 250 males and 1 fixture for each additional 200 females.			Over 750, add 1 fixture for each additional 500 persons.	

TABLE 422.1
MINIMUM PLUMBING FACILITIES[1] (continued)

TYPE OF OCCUPANCY[2]	WATER CLOSETS (FIXTURES PER PERSON)[3]		URINALS (FIXTURES PER PERSON)	LAVATORIES (FIXTURES PER PERSON)		BATHTUBS OR SHOWERS (FIXTURES PER PERSON)	DRINKING FOUNTAINS/ FACILITIES (FIXTURES PER PERSON)	OTHER
A-4 Assembly occupancy (indoor activities or sporting events with spectator seating)- swimming pools, skating rinks, arenas and gymnasiums	Male 1: 1-100 2: 101-200 3: 201-400	Female 1: 1-25 2: 26-50 3: 51-100 4: 101-200 6: 201-300 8: 301-400	Male 1: 1-100 2: 101-200 3: 201-400 4: 401-600	Male 1: 1-200 2: 201-400 3: 401-750	Female 1: 1-100 2: 101-200 4: 201-300 5: 301-500 6: 501-750	—	1: 1-250 2: 251-500 3: 501-750	1 service sink or laundry tray
	Over 400, add 1 fixture for each additional 500 males and 1 fixture for each additional 125 females.		Over 600, add 1 fixture for each additional 300 males.	Over 750, add 1 fixture for each additional 250 males and 1 fixture for each additional 200 females.			Over 750, add 1 fixture for each additional 500 persons.	
A-5 Assembly occupancy (outdoor activities or sporting events)- amusement parks, grandstands and stadiums	Male 1: 1-100 2: 101-200 3: 201-400	Female 1: 1-25 2: 26-50 3: 51-100 4: 101-200 6: 201-300 8: 301-400	Male 1: 1-100 2: 101-200 3: 201-400 4: 401-600	Male 1: 1-200 2: 201-400 3: 401-750	Female 1: 1-100 2: 101-200 4: 201-300 5: 301-500 6: 501-750	—	1: 1-250 2: 251-500 3: 501-750	1 service sink or laundry tray
	Over 400, add 1 fixture for each additional 500 males and 1 fixture for each additional 125 females.		Over 600, add 1 fixture for each additional 300 males.	Over 750, add 1 fixture for each additional 250 males and 1 fixture for each additional 200 females.			Over 750, add 1 fixture for each additional 500 persons.	
B Business occupancy (office, professional or service type transactions)- banks, vet clinics, hospitals, car wash, banks, beauty salons, ambulatory health care facilities, laundries and dry cleaning, educational institutions (above high school), or training facilities not located within school, post offices and printing shops	Male 1: 1-50 2: 51-100 3: 101-200 4: 201-400	Female 1: 1-15 2: 16-30 3: 31-50 4: 51-100 8: 101-200 11: 201-400	Male 1: 1-100 2: 101-200 3: 201-400 4: 401-600	Male 1: 1-75 2: 76-150 3: 151-200 4: 201-300 5: 301-400	Female 1: 1-50 2: 51-100 3: 101-150 4: 151-200 5: 201-300 6: 301-400	—	1 per 150	1 service sink or laundry tray
	Over 400, add 1 fixture for each additional 500 males and 1 fixture for each additional 150 females.		Over 600, add 1 fixture for each additional 300 males.	Over 400, add 1 fixture for each additional 250 males and 1 fixture for each additional 200 females.				
E Educational occupancy-private or public schools	Male 1 per 50	Female 1 per 30	Male 1 per 100	Male 1 per 40	Female 1 per 40	—	1 per 150	1 service sink or laundry tray
F1, F2 Factory or Industrial occupancy-fabricating or assembly work	Male 1: 1-50 2: 51-75 3: 76-100	Female 1: 1-50 2: 51-75 3: 76-100	—	Male 1: 1-50 2: 51-75 3: 76-100	Female 1: 1-50 2: 51-75 3: 76-100	1 shower for each 15 persons exposed to excessive heat or to skin contamination with poisonous, infectious or irritating material.	1: 1-250 2: 251-500 3: 501-750	1 service sink or laundry tray
	Over 100, add 1 fixture for each additional 40 persons.			Over 100, add 1 fixture for each additional 40 persons.			Over 750, add 1 fixture for each additional 500 persons.	

TABLE 422.1
MINIMUM PLUMBING FACILITIES[1] (continued)

TYPE OF OCCUPANCY[2]		WATER CLOSETS (FIXTURES PER PERSON)[3]		URINALS (FIXTURES PER PERSON)	LAVATORIES (FIXTURES PER PERSON)		BATHTUBS OR SHOWERS (FIXTURES PER PERSON)	DRINKING FOUNTAINS/ FACILITIES (FIXTURES PER PERSON)	OTHER
I-1 Institutional occupancy (houses more than 16 persons on a 24-hour basis)- substance abuse centers, assisted living, group homes, or residential facilities.		Female 1 per 15	Male 1 per 15	—	Female 1 per 15		1 per 8	1 per 150	1 service sink or laundry tray
I-2 Institutional occupancy-medical, psychiatric, surgical or nursing homes	Hospitals and nursing homes-individual rooms and ward room	1 per room		—	1 per room		1 per room	1 per 150	1 service sink or laundry tray
		1 per 8 patients		—	1 per 10 patients		1 per 20 patients		
	Hospital Waiting or Visitor Rooms	1 per room		—	1 per room		—	1 per room	—
	Employee Use	Male 1: 1-15 2: 16-35 3: 36-55	Female 1: 1-15 3: 16-35 4: 36-55	—	Male 1 per 40	Female 1 per 40	—	—	—
		Over 55, add 1 fixture for each additional 40 persons.							
I-3 Institutional occupancy (houses more than 5 people)	Prisons	1 per cell		—	1 per cell		1 per 20	1 per cell block/floor	—
	Correctional facilities or juvenile center	1 per 8		—	1 per 10		1 per 8	1 per floor	1 service sink or laundry tray
	Employee Use	Male 1: 1-15 2: 16-35 3: 36-55	Female 1: 1-15 3: 16-35 4: 36-55	—	Male 1 per 40	Female 1 per 40	—	1 per 150	—
		Over 55, add 1 fixture for each additional 40 persons.							
I-4 Institutional occupancy (any age that receives care for less than 24 hours)		Male 1: 1-15 2: 16-35 3: 36-55	Female 1: 1-15 3: 16-35 4: 36-55	—	Male 1 per 40	Female 1 per 40	—	1 per 150	1 service sink or laundry tray
		Over 55, add 1 fixture for each additional 40 persons.							

TABLE 422.1
MINIMUM PLUMBING FACILITIES[1] (continued)

TYPE OF OCCUPANCY[2]		WATER CLOSETS (FIXTURES PER PERSON)[3]		URINALS (FIXTURES PER PERSON)	LAVATORIES (FIXTURES PER PERSON)		BATHTUBS OR SHOWERS (FIXTURES PER PERSON)	DRINKING FOUNTAINS/ FACILITIES (FIXTURES PER PERSON)	OTHER
M Mercantile occupancy (the sale of merchandise and accessible to the public)		Male 1: 1-100 2: 101-200 3: 201-400	Female 1: 1-100 2: 101-200 4: 201-300 6: 301-400	Male 0: 1-200 1: 201-400	Male 1: 1-200 2: 201-400	Female 1: 1-200 2: 201-300 3: 301-400	—	1: 1-250 2: 251-500 3: 501-750	1 service sink or laundry tray
		Over 400, add 1 fixture for each additional 500 males and 1 fixture for each 200 females.		Over 400, add 1 fixture for each additional 500 males.	Over 400, add 1 fixture for each additional 500 males and 1 fixture for each 400 females.		—	Over 750, add 1 fixture for each additional 500 persons.	—
R-1 Residential occupancy (minimal stay)-hotels, motels, bed and breakfast homes		1 per sleeping room		—	1 per sleeping room		1 per sleeping room	—	1 service sink or laundry tray
R-2 Residential occupancy (long-term or permanent)	Dormitories	Male 1 per 10	Female 1 per 8	1 per 25	Male 1 per 12	Female 1 per 12	1 per 8	1 per 150	1 service sink or laundry tray
		Add 1 fixture for each additional 25 males and 1 fixture for each additional 20 females.		Over 150, add 1 fixture for each additional 50 males.	Add 1 fixture for each additional 20 males and 1 fixture for each additional 15 females.				
	Employee Use	Male 1: 1-15 2: 16-35 3: 36-55	Female 1: 1-15 3: 16-35 4: 36-55	—	Male 1 per 40	Female 1 per 40	—		
		Over 55, add 1 fixture for each additional 40 persons							
	Apartment house/unit	1 per apartment		—	1 per apartment		1 per apartment	—	1 kitchen sink per apartment. 1 laundry tray or 1 automatic clothes washer connection per unit or 1 laundry tray or 1 automatic clothes washer connection for each 12 units
R-3 Residential occupancy (long-term or permanent in nature) for more than 5 but does not exceed 16 occupants)		Male 1 per 10	Female 1 per 8	—	Male 1 per 12	Female 1 per 12	1 per 8	1 per 150	1 service sink or laundry tray
		Add 1 fixture for each additional 25 males and 1 fixture for each additional 20 females.			Add 1 fixture for each additional 20 males and 1 fixture for each additional 15 females.				
R-3 Residential occupancy (one and two family dwellings)		1 per one and two family dwelling		—	1 per one and two family dwelling		1 per one and two family dwelling	—	1 kitchen sink and 1 automatic clothes washer connection per one and two family dwelling

TABLE 422.1
MINIMUM PLUMBING FACILITIES[1] (continued)

TYPE OF OCCUPANCY[2]	WATER CLOSETS (FIXTURES PER PERSON)[3]		URINALS (FIXTURES PER PERSON)	LAVATORIES (FIXTURES PER PERSON)		BATHTUBS OR SHOWERS (FIXTURES PER PERSON)	DRINKING FOUNTAINS/ FACILITIES (FIXTURES PER PERSON)	OTHER
R-4 Residential occupancy (residential care or assisted living)	Male 1 per 10	Female 1 per 8	—	Male 1 per 12	Female 1 per 12	1 per 8	1 per 150	1 service sink or laundry tray
	Add 1 fixture for each additional 25 males and 1 fixture for each additional 20 females.			Add 1 fixture for each additional 20 males and 1 fixture for each additional 15 females.				
S-1, S-2 Storage occupancy-storage of goods, warehouse, aircraft hanger, food products, appliances	Male 1: 1-100 2: 101-200 3: 201-400	Female 1: 1-100 2: 101-200 3: 201-400	—	Male 1: 1-200 2: 201-400 3: 401-750	Female 1: 1-200 2: 201-400 3: 401-750	—	1: 1-250 2: 251-500 3: 501-750	1 service sink or laundry tray
	Over 400, add 1 fixture for each additional 500 males and 1 fixture for each additional 150 females.			Over 750, add 1 fixture for each additional 500 persons.			Over 750, add 1 fixture for each additional 500 persons.	

Notes:

[1] The figures shown are based upon one fixture being the minimum required for the number of persons indicated or any fraction thereof.

[2] A restaurant is defined as a business that sells food to be consumed on the premises.

a. The number of occupants for a drive-in restaurant shall be considered as equal to the number of parking stalls.

b. Hand-washing facilities shall be available in the kitchen for employees.

[3] The total number of required water closets for females shall be not less than the total number of required water closets and urinals for males. *[BSC] This requirement shall not apply when single occupancy toilet facilities are provided for each sex in an A or E occupancy with an occupant load of less than 50. Either*

a. The required urinal shall be permitted to be omitted or

b. If installed, the urinal shall not require a second water closet to be provided for the female.

[4] ***[BSC, DSA-AC, DSA-SS, DSA-SS/CC, HCD 1 & HCD 2, OSHPD 1, 2, 3 & 4]*** *In accordance with Sections 1.8.7 and 301.2, the Authority Having Jurisdiction may approve alternative designs criteria when determining the minimum number of plumbing fixtures.*

TABLE A.
OCCUPANT LOAD FACTOR:
[BSC, DSA-SS & DSA-SS/CC]

OCCUPANCY*, **	OCCUPANT LOAD FACTOR (square feet) (CBC 2001, Table A-29A)
Group A	
1. Auditoriums, convention halls, dance floors, lodge rooms, stadiums, and casinos (where no fixed seating is provided) (use ½ "one-half" the number of fixed seating)	*15*
2. Conference rooms, dining rooms, drinking establishments, exhibit rooms, gymnasiums, lounges, stages, and similar uses, including restaurants classified as Group B occupancies	*30*
3. Worship places; principal assembly area, educational and activity unit (where no fixed seating is provided) (use ½ "one-half" the number of fixed seating)	*30*
Group B *Office or public buildings (area accessible to the public)*	*200*
Group E *Schools for day care, elementary, secondary*	*50*
Educational Facilities Other than Group E *Colleges, universities, adult centers, etc.*	*50*
Group F *Workshops, foundries and similar establishments*	*2,000*
Group H *Hazardous materials fabrication and storage*	*2,000*
Group I *Hospital general use area, health care facilities*	*200*
Group M *Retail or wholesale stores*	*200*
Group R *Congregate residence, Group R-1*	*200*
Group S *Warehouse*	*5,000*

* *Any uses not specifically listed shall be based on similar uses listed in this table.*

** *For building or space with mixed occupancies, use appropriate occupancy group for each area (for example, a school may have an "A" occupancy for the gymnasium, a "B" occupancy for the office, an "E" occupancy for the classrooms, etc.)*
Accessory areas may be excluded (for example: hallway, restroom, stair enclosure)

TABLE 4-2
[OSHPD 1, 2, 3 & 4][24] MINIMUM PLUMBING FACILITIES

SPACE	HANDWASHING FIXTURE	SCRUB SINKS[3]	TOILETS	BATHTUBS OR SHOWERS	SERVICE SINKS[1]	CLINIC SINKS
Administration Lobby						
Public Toilet - Male	*1*[2]		*1*			
Public Toilet - Female	*1*[2]		*1*			
Airborne infection isolation room	*1*					
Airborne infection isolation anteroom	*1*[20]					
Airborne infection isolation toilet room	*1*[2]		*1*[5]	*1*[5]		
Cardiac Catheterization procedure room		*1*[4, 33]				
Central Sterile Supply	*1*[15]					
Cesarean/Delivery Service Space						
Labor Rooms	*1*[33]		*1*[9]	*1*[9]		
Recovery Room	*1*[33]					*1*
Drug distribution station	*1*					
Cesarean operating room		*2*[10, 33]				
Delivery room		*1*[10, 33]				
Staff lounge						
Staff Toilet - Male	*1*		*1:1-15*			
Staff Toilet - Female	*1*		*1:1-15*			
LDR or LDRP room	*1*[33]		*1*	*1*		
Waiting area/room						
Public Toilet - Male	*1*[2]		*1*			
Public Toilet - Female	*1*[2]		*1*			
Clinical Laboratory Service Space[11]	*1*					
Dietetic Service Space					*1*	
Kitchen	*1*[33]					
Food serving area	*1*[33]					
Food Preparation	*1*[33]					
Dietary Staff Toilet - Male	*1*[2]		*1:1-15*			
Dietary Staff Toilet - Female	*1*[2]		*1:1-15*			
Emergency Service Treatment room	*1*					
Open plan	*1:4 cubicles*					
Observation units	*1:4 cubicles*					
Trauma/Cardiac, Emergency surgery, Cystoscopy, Cast Room		*1*[4,33]				
Intensive Care Units[7]					*1*	*1*
Open plan	*1:3 beds*[33]					
Patient rooms[28]	*1*[33]					
Newborn Intensive Care Unit (NICU)	*1:4 bassinets*[17, 33]				*1*	*1*
Control station	*1*[33]					
Staff lounge						
Staff Toilet - Male	*1*[2]		*1:1-15*			
Staff Toilet - Female	*1*[2]		*1:1-15*			
Employee dressing rooms and lockers						
Staff Toilet - Male	*1*[2]		*1:1-15*			

SPACE	HANDWASHING FIXTURE	SCRUB SINKS[3]	TOILETS	BATHTUBS OR SHOWERS	SERVICE SINKS[1]	CLINIC SINKS
Staff Toilet - Female	*1*[2]		*1:1-15*			
Exam and treatment rooms	*1*					
Housekeeping room[1]					*1*	
Laboratories	*1*[15]					
Laundry soiled linen, receiving, holding and sorting	*1*					
Medicine preparation room	*1*[19]					
Morgue and Autopsy	*1*					
Nourishment area	*1+1*[2]					
Nuclear Medicine room	*1*					
Mold room	*1*					
Patient room	*1*					
Patient toilet and bath facilities[13]	*1*[2]		*1:4 beds*	*1:12*[16]		
Central bathing facility[16]			*1*	*1*		
Administration Center or Nurses' Stations[27]	*1*		*1*[12]			
Newborn/well baby nursery	*1:6 bassinets*[33]					
Workroom	*1*[33]					
Gastrointestinal endoscopy procedure room	*1*[33]					
Pediatric and Adolescent Unit toilet room	*1*[2,26]		*1*[26]			
Pharmacy	*1*[25]					
Staff Toilet - Male	*1*[2]		*1:1-15*			
Staff Toilet - Female	*1*[2]		*1:1-15*			
Compounding area for parenteral solutions	*1*					
Postanesthesia care units (PACU)						*1*
Open plan	*1:4 gurney spaces*[33]					
Individual rooms	*1*[33]					
Protective environment room	*1*[33]					
Protective environment anteroom	*1*[20,33]					
Protective environment toilet room	*1*[2]		*1*[5]	*1*[5]		
Psychiatric unit patient room	*1*		*1*			
Radiological/Imaging Services Space	*1*		*1*[29]			
Computerized tomography (CT)						
Ultrasound[8]			*1*[30]			
Angiography		*1*[4, 31]				
Fluoroscopy[8]			*1*[30]			
Staff Toilet[18] *- Male*	*1*[2]		*1:1-15*			
Staff Toilet[18] *- Female*	*1*[2]		*1:1-15*			
Rehabilitation Therapy Space						
Training toilet			*1*			
Physical therapy service space	*1*					
Occupational therapy service space	*1*					
Speech pathology	*1*					
Renal Dialysis Service Space	*1:4 stations*				*1*	
Bloodborne Infection Isolation Room	*1*					
Nurses' station	*1*					
Medication dispensing	*1*					
Home training room	*1*					

SPACE	HANDWASHING FIXTURE	SCRUB SINKS[3]	TOILETS	BATHTUBS OR SHOWERS	SERVICE SINKS[1]	CLINIC SINKS
Repair room[11]	*1*				*1*	
Dialysis Patient toilet	*1*		*1*			
Staff lounge						
Staff Toilet - Male	*1*		*1:1-15*	*1 shower*		
Staff Toilet - Female	*1*		*1:1-15*	*1 shower*		
Surgical Service Space		*2[33]*			*1*	
Staff clothing change areas						
Staff Toilet - Male	*1[2]*		*1*	*1 shower*		
Staff Toilet - Female	*1[2]*		*1*	*1 shower*		
Clean-up rooms	*1*					
Substerile area	*1*					
Anesthesia workroom	*1*					
Soiled workroom or soiled holding	*1*					*1[34]*
Cancer treatment/infusion therapy treatment	*1:4 stations*					
Utility/Work Room						
Clean[21]	*1*					
Soiled[22]	*1*					*1[14]*
Patient beds [Skilled Nursing/Intermediate Care Facilities][medical model]	*1:8[2]*		*1:6*	*1:20*		
Patient toilet and bath facilities[13] [Correctional Treatment Center]	*1:8[2]*		*1:6*	*1:12*		
Airborne infection isolation anteroom[6] [Correctional Treatment Center]	*1[6]*		*1[6]*	*1[6]*		
Airborne infection isolation anteroom [Correctional Treatment Center]	*1*					
Protective environment room[6] [Correctional Treatment Center]	*1[6]*		*1[6]*	*1[6]*		
Protective environment anteroom [Correctional Treatment Center]	*1*					

Notes:

[1] Each department or nursing unit shall be served by a housekeeping room equipped with a service sink. Departments may share service closets provided the departmental services are compatible. A dedicated housekeeping room shall be provided for the following services: Surgical/Catherization, ICU, NICU, nursery, dietary, renal dialysis and outpatient surgery.

[2] Conventional spouts and controls on hot-and cold-water supplies are acceptable. Aerators are not permitted. Non-aerating laminar flow devices are permitted. Nourishment areas shall have a handwashing fixture in or immediately accessible from the nourishment area, in addition to a nourishment sink.

[3] Scrub sinks shall be located outside of sterile procedure rooms. A minimum of two scrub sinks shall be provided in a surgical unit containing one operating room. Four scrub sinks shall be provided in surgical units containing two operating rooms. One additional scrub sink shall be provided per each additional operating room.

[4] The scrub sink is in addition to the required number for surgeries.

[5] The following fixtures shall be provided in airborne infection or protective environment rooms of hospitals only:

a. Within an adjoining toilet room, a lavatory, a shower containing a seat or a space for a shower chair, and toilet equipped with bedpan flushing attachment with a vacuum breaker.

b. A handwashing fixture within a separate anteroom.

[6] The following fixtures shall be provided in isolation rooms of correctional treatment centers only:

a. Within an adjoining toilet area, a handwashing fixture, a shower containing a seat or a space for a shower chair, and water closet equipped with bedpan flushing attachment with a vacuum breaker.

b. A handwashing fixture within a separate anteroom.

[7] Includes burn center spaces, acute respiratory-care service spaces, and coronary-care service spaces.

[8] A toilet room with handwashing fixture shall directly adjoin each procedure room.

[9] One toilet with lavatory and one shower may serve two labor rooms.

[10] One additional scrub sink for each additional cesarean or delivery operating room.

[11] Provide emergency eye-wash and shower.

[12] Conveniently located for staff use.

[13] Fixtures serving individual patient rooms shall not be considered as meeting the required ratios for bedrooms not served by individual adjoining toilet or bathrooms.

[14] The clinic sink may be deleted if all bedrooms in the nursing unit are provided with adjoining toilets with bedpan flushing devices.

[15] Conventional controls on hot-and cold-water supplies are acceptable. The water discharge points shall be 5 inches (127 millimeters) above the fixture rim. Aerators are not permitted. Non-aerating laminar flow devices are permitted.

[16] *A minimum of one bathtub is required on each floor of an acute care or acute psychiatric hospital providing skilled nursing or intermediate care services. Special bathing facilities/gurney shower shall be provided at a minimum ratio of one per 100 beds for acute care facilities.*
[17] *In a multiple-bed room, every bed position shall be within 20 feet (6 meters) of a hands-free handwashing fixture. Where an individual room concept is used, a handwashing fixture shall be provided within each infant care room.*
[18] *When three or more procedure rooms are provided.*
[19] *If a separate medicine room is provided, the room shall be equipped with a sink in addition to the nurses' station handwashing fixture. Hot-water supplies are optional.*
[20] *Not required when there is a handwash fixture in the patient bed room.*
[21] *Handwashing fixtures may be deleted if room is used for storage and holding only.*
[22] *If room is used only for temporary holding of soiled materials, clinic sink and work counter may be omitted. If the flushing-rim clinical sink is eliminated, facilities for cleaning bedpans shall be provided elsewhere.*
[23] *Toilet shall be equipped with a bedpan flushing attachment.*
[24] *Optional services approved by the licensing agency shall comply with the applicable space requirements of OSHPD 1 and 2.*
[25] *Shall be provided in each separate room where open medication is handled.*
[26] *Conveniently accessible throughout the unit.*
[27] *Includes rooms or areas within coronary and intensive-care units and postanethesia recovery rooms.*
[28] *Modular toilet/sink combination units located within a privacy curtain may be used within individual patient space or private room. The toilet fixture shall be completely contained within cabinetry when not in use, and shall be enclosed when flushed. Bedpan washers shall not be permitted in patient bedrooms.*
[29] *In service spaces with procedure rooms that do not have dedicated patient toilets, provide a minimum of one patient toilet room with a separate handwashing fixture within the service space.*
[30] *Toilet room shall be accessible from the procedure room.*
[31] *Scrub sink shall be located outside the staff entrance to the procedure room.*
[32] *Not used.*
[33] *Handwashing and scrub sink fixtures shall not be equipped with wrist or elbow blades but shall be equipped with sensor controls, or controls that do not involve contact with the upper extremities.*
[34] *If room is used only for temporary holding of soiled material, clinic sink and work counter may be omitted.*

TABLE 4-3

TYPE OF BUILDING OR OCCUPANCY	WATER CLOSETS (FIXTURES PER PERSON)		URINALS (TROUGH URINAL TO INDIVIDUAL URINAL EQUIVALENCE)	LAVATORIES (FIXTURES PER PERSON)	BATHTUBS OR SHOWERS FIXTURES PER PERSON)[7]	DRINKING FOUNTAINS (FIXTURES PER PERSON)[3]
	MALE	FEMALE	MALE			
Nonindustrial—office buildings, public buildings and similar establishments	*1 1-15 2 16-35 3 36-55 4 56-80 5 81-110 6 111-150 1 additional for each additional 40 employees or fraction thereof*	*1 1-15 2 16-35 3 36-55 4 56-80 5 81-110 6 111-150*	*Length of trough urinal / Number of individual urinals 24" (610 mm) 1 36" (914 mm) 2 48" (1219 mm) 2 60" (1524 mm) 3*	*1 1-15 2 16-35 3 36-60 4 61-90 5 91-125 1 additional for each additional 4 employees or fraction thereof*	*1:10 persons per shift required to shower*	—
Industrial–factories, warehouses, loft buildings and similar establishments	*1 1-15 2 16-35 3 36-55 4 56-80 5 81-110 6 111-150 1 additional for each additional 40 employees or fraction thereof*	*1 1-15 2 16-35 3 36-55 4 56-80 5 81-110 6 111-150*	*24" (610 mm) 1 36" (914 mm) 2 48" (1219 mm) 2 60" (1524 mm) 3 72" (1829 mm) 4*	*1 to 100 employees 1 per 10 Over 100 employees 1 additional for each additional 15 employees or fraction thereof*	*1:10 persons per shift required to shower*	—

Notes:
[1] *The figures shown are based on one fixture being the minimum required for the number of persons indicated or any fraction thereof.*
[2] *Each water closet shall occupy a separate compartment which shall be equipped with a door, door latch and clothes hook. The door and the walls or partitions between fixtures shall be sufficient to assure privacy.*
[3] *Drinking fountains shall not be located in toilet rooms.*
[4] *Washing facilities shall be reasonably accessible to all employees.*
[5] *Toilet facilities shall be accessible to the employees at all times. Where practicable, toilet facilities should be within 200 feet (61 m) of locations at which workers are regularly employed and should not be more than one floor-to-floor flight of stairs from working areas.*
[6] *Urinals may be installed instead of water closets in toilet rooms to be used only by men provided that the number of water closets shall not be less than two thirds of the minimum number of toilet facilities specified. The length of trough urinals to the equivalent number of individual urinals shall be based on the above table.*
[7] *When there are less than five employees, separate toilet rooms for each sex are not required provided toilet rooms can be locked from the inside and contain at least one water closet.*
[8] *Twenty-four linear inches of wash sink or 18 inches of circular basin, when provided with water outlets for such space, shall be considered equivalent to one lavatory.*
Exception: *The requirements of Table 4-3 do not apply to mobile crews or to normally unattended work locations provided employees at these locations have immediately available transportation to nearby toilet facilities which meet the requirements of Table 4-3.*

TABLE 4-4

TYPE OF BUILDING OR OCCUPANCY[2]	WATER CLOSETS (FIXTURES PER PERSON)	URINALS (FIXTURES PER MALE)	LAVATORIES (FIXTURES PER PERSON)	BATHTUBS OR SHOWERS (FIXTURES PER PERSON)	DRINKING FOUNTAINS (FIXTURES PER PERSON)
Day Use Public Beaches[1,2]	*Male Female* *1 1-100 1 1-100* *No sex designated* *1 1-500* *Minimum of 2*	*May be substituted for up to two-thirds of the water closets required*			
Picnic Areas	*Male Female* *1 1-50 1 1-50*				
Overnight Use Public Beaches[2]	*1 1-7.5 campsites[3]* *1 1-7.5 campsites[3]*	*May be substituted for up to one-third of the water closets required[3]*		*1 1-12.5 campsites[4]*	
Organized Camps	*1 1-15[3]*		*1 1-15*	*1 1-156*	*Minimum 1 per camp*

Notes:

[1] Toilets shall be located in accordance with actual use patterns on the beach. The reasonable intent of the toilet requirements is that it should apply on the basis of average daily use during periods of peak use. The health officer may determine how many days the population standard may be exceeded.

[2] Laundry facilities are not required, but if they are provided, must be a minimum of two laundry trays or a washing machine.

[3] Toilet facilities shall not be farther than 400 feet from any lot or campsite.

[4] Showers are not required, but it provided, they shall be provided on the indicated ratio. Outdoor rinse-off showers may be cold water only.

[5] Toilets shall be located within 300 feet from the living accommodations they serve.

[6] Showers shall be provided in the living area or in a centrally located structure.

***Exception:** Intermittent short-term organized camps are not required to provide shower facilities, but it provided, they shall comply with this part.*

HISTORY NOTE APPENDIX

CALIFORNIA PLUMBING CODE
(TITLE 24, PART 5, CALIFORNIA CODE OF REGULATIONS)

For prior history, see the History Note Appendix to the California Plumbing Code (CPC), 2010 Triennial Edition effective January 1, 2011.

1. *(BSC 05/12, DSA-SS 05/12, HCD 05/12, OSHPD 06/12, SFM 06/12) Adoption by reference of the 2012 Uniform Plumbing Code (UPC) with necessary state amendments and repeal of the 2009 edition of the UPC. Effective on January 1, 2014.*

2. *(OSHPD 02/13 and 03/13) Change without regulatory effect to remove and make inoperable provisions regarding OSHPD 3SE as ordered by The Superior Court of California, County of Alameda (Case No. RG13681364) Rulemakings were approved by the California Building Standards Commission on November 6, 2013 and filed with the Secretary of State on November 7, 2013, effective December 7, 2013.*

3. *Errata to correct editorial errors within Chapters 1, 3, 4, 6, 7, 14 and 17 of this code. Effective Jan. 1, 2014.*

4. *2013 Intervening Cycle Supplement (BSC 05/13, HCD 01/13, OSHPD 04/13) Adopted by the California Building Standards Commission on July 22, 2014, published on January 1, 2015, effective July 1, 2015.*

5. *(BSC EF 02/15, DSA-SS EF 04/15, HCD EF 02/15) Emergency regulations amend Sections 403.0, 403.3, and 403.7. Approved as an emergency on October 21, 2015, effective upon filing with Secretary of State on October 23, 2015. An emergency supplement was not issued for the initial emergency building standards but was provided in Building Standards Commission Information Bulletin 15-04, dated October 23, 2015, which is now superseded. The supplement provides emergency building standards which were made permanent pursuant to Government Code Sections 11346.2 to 11347.3 adopted by the Building Standards Commission on January 20, 2016, and filed with Secretary of State on January 26, 2016.*

6. *(OSHPD EF 02/15) Emergency regulations amend Section 403.1. Approved as an emergency on December 16, 2015, effective upon filing with Secretary of State on December 17, 2015. An emergency supplement was not issued for the initial emergency building standards. The supplement provides emergency building standards which were made permanent pursuant to Government Code Sections 11346.2 to 11347.3 adopted by the Building Standards Commission on April 19, 2016, and filed with the Secretary of State on April 26, 2016.*