

REVISION RECORD
FOR THE STATE OF CALIFORNIA
ERRATA

January 1, 2017

2016 Title 24, Part 5, California Plumbing Code

General Information:

1. The date of this erratum is for identification purposes only. See the History Note Appendix on the backside or accompanying page.
2. This erratum is issued by the California Building Standards Commission in order to correct non-substantive printing errors or omissions in California Code of Regulations, Title 24, Part 5, of the 2016 California Plumbing Code. 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. An erratum to Title 24 is a non-regulatory correction because of a printing error or omission that does not differ substantively from the official adoption by the California Building Standards Commission. Accordingly, the corrected code text provided by this erratum may be applied on and after the stated effective date.
4. You may wish to retain the superseded material with this revision record so that the prior wording of any section can be easily ascertained.

Title 24, Part 5

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FOR THE STATE OF CALIFORNIA
ERRATA (continued)

January 1, 2017

2016 Title 24, Part 5, California Plumbing Code

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CALIFORNIA MATRIX ADOPTION TABLES

Format of the Matrix Adoption Tables

The matrix adoption tables, examples of which follow, are non-regulatory aids intended to show the user which state agencies have adopted and/or amended given sections of model code. An agency's statutory authority for certain occupancies or building applications determines which chapter or section may be adopted, repealed, amended or added. See Chapter 1, Division I, Sections 1.2.0 through 1.14.0, for agency authority, building application and enforcement responsibilities.

The side headings identify the scope of the state agencies' adoption as follows:

Adopt the entire UPC chapter without state amendments.

If there is an "X" under a particular state agency's acronym in this row, it means that particular state agency has adopted the entire model code chapter without any state amendments.

Example:

**CALIFORNIA PLUMBING CODE – MATRIX ADOPTION TABLE
CHAPTER 1 - GENERAL CODE PROVISIONS**

(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	BSC-CG	SFM	HCD			DSA			OSHPD				BSCC	DPH	AGR	DWR	CEC	CA	SL	SLC
				1	2	1-AC	AC	SS	SS/CC	1	2	3	4								
Adopt Entire Chapter			X																		
Adopt Entire Chapter as amended (amended sections listed below)								S	A	M	P	L	E								
Adopt only those sections that are listed below																					
Chapter/Section																					
202																					

Adopt the entire UPC chapter as amended, state-amended sections are listed below:

If there is an "X" under a particular state agency's acronym in this row, it means that a particular state agency has adopted the entire model code chapter, with state amendments.

Each state-amended section that the agency has added to that particular chapter is listed. There will be an "X" in the column, by that particular section, under the agency's acronym, as well as an "X" by each section that the agency has adopted.

Example:

CALIFORNIA PLUMBING CODE – MATRIX ADOPTION TABLE
CHAPTER 1 - GENERAL CODE PROVISIONS

(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	BSC-CG	SFM	HCD			DSA			OSHPD				BSCC	DPH	AGR	DWR	CEC	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				S	A	M	P	L	E									
Adopt only those sections that are listed below																					
Chapter/Section																					
202	X		X																		

Adopt only those sections which are listed below:

If there is an “X” under a particular state agency’s acronym in this row, it means that particular state agency is adopting only specific model code or state-amended sections within this chapter. There will be an “X” in the column under the agency’s acronym, as well as an “X” by each section that the agency has adopted.

Example:

CALIFORNIA PLUMBING CODE – MATRIX ADOPTION TABLE
CHAPTER 1 - GENERAL CODE PROVISIONS

(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	BSC-CG	SFM	HCD			DSA			OSHPD				BSCC	DPH	AGR	DWR	CEC	CA	SL	SLC
				1	2	1-AC	AC	SS	SS/C	1	2	3	4								
Adopt Entire Chapter																					
Adopt Entire Chapter as amended (amended sections listed below)							S	A	M	P	L	E									
Adopt only those sections that are listed below																					
Chapter/Section																					
101	X																				
102	X																				

CALIFORNIA PLUMBING CODE – MATRIX ADOPTION TABLE
CHAPTER 1 - ADMINISTRATION

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

Adopting Agency	BSC	BSC-CG	SFM	HCD			DSA			OSHPD				BSCC	DPH	AGR	DWR	CEC	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)																					
Adopt only those sections that are listed below	X			X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
Chapter/Section																					
<i>Division I – California Administration</i>																					
1.I.1	X			X	X	X	X			X	X	X	X	X							
1.I.2	X			X	X	X	X			X	X	X	X	X	X						
1.I.3	X			X	X	X	X			X	X	X	X	X	X						
1.I.4	X			X	X	X	X			X	X	X	X	X	X						
1.I.5	X			X	X	X	X			X	X	X	X	X	X						
1.I.6	X			X	X	X	X			X	X	X	X	X	X						
1.I.7	X			X	X	X	X			X	X	X	X	X	X						
1.I.8	X			X	X	X	X			X	X	X	X	X	X						
1.I.9	X			X	X	X	X			X	X	X	X	X	X						
1.I.10	X			X	X	X	X			X	X	X	X	X	X						
1.I.11	X			X	X	X	X			X	X	X	X	X	X						
1.I.12	X			X	X	X	X			X	X	X	X	X	X						
1.2.0	X																				
1.3.0																X					
1.4.0																			X		
1.6.0																	X				
1.7.0																		X			
1.8.0				X	X	X															
1.9.1							X														
1.9.1.1							X														
1.9.2								X													
1.9.2.1								X													
1.9.2.2									X												
1.10.1										X											
1.10.2											X										
1.10.3												X									

CALIFORNIA PLUMBING CODE – MATRIX ADOPTION TABLE
CHAPTER 1 - ADMINISTRATION (continued)

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

Adopting Agency	BSC	BSC-CG	SFM	HCD			DSA			OSHPD				BSCC	DPH	AGR	DWR	CEC	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)																					
Adopt only those sections that are listed below	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
Chapter/Section																					
<i>Division I – California Administration</i>																					
<i>I.10.4</i>															X						
<i>I.11.0</i>			X																		
<i>I.13.0</i>																	X				
Division II - Administration																					
104.2 Items 1 & 2				X	X																

This state agency does not adopt sections identified with the following symbol: †

The Office of the State Fire Marshal's adoption of this chapter or individual sections is applicable to structures regulated by other state agencies pursuant to Section 1.11.

CHAPTER 1

ADMINISTRATION

DIVISION I

CALIFORNIA ADMINISTRATION

1.1.0 General.

1.1.1 Title. These regulations shall be known as the California Plumbing Code, may be cited as such and will be referred to herein as “this code.” The California Plumbing Code is Part 5 of thirteen parts of the official compilation and publication of the adoption, amendment, and repeal of plumbing regulations to the California Code of Regulations, Title 24, also referred to as the California Building Standards Code. This part incorporates by adoption the 2015 Uniform Plumbing Code of the International Association of Plumbing and Mechanical Officials with necessary California amendments.

1.1.2 Purpose. The purpose of this code is to establish the minimum requirements to safeguard the public health, safety and general welfare through structural strength, means of egress facilities, stability, access to persons with disabilities, sanitation, adequate lighting and ventilation, and energy conservation; safety to life and property from fire and other hazards attributed to the built environment; and to provide safety to fire fighters and emergency responders during emergency operations.

1.1.3 Scope. The provisions of this code shall apply to the construction, alteration, movement, enlargement, replacement, repair, equipment, use and occupancy, location, maintenance, removal, and demolition of every building or structure or any appurtenances connected or attached to such buildings or structures throughout the State of California.

1.1.3.1 Non-State-Regulated Buildings, Structures, and Applications. Except as modified by local ordinance pursuant to Section 1.1.8, the following standards in the California Code of Regulations, Title 24, Parts 2, 2.5, 3, 4, 5, 6, 9, 10 and 11 shall apply to all occupancies and applications not regulated by a state agency.

1.1.3.2 State-Regulated Buildings, Structures, and Applications. The model code, state amendments to the model code, and/or state amendments where there are no relevant model code provisions shall apply to the following buildings, structures, and applications regulated by state agencies as specified in Section 1.2.0 through 1.14.0, except where modified by local ordinance pursuant to Section 1.1.8. When adopted by a state agency, the provisions of this code shall be enforced by the appropriate enforcing agency, but only to the extent of authority granted to such agency by the state Legislature.

Note: See Preface to distinguish the model code provisions from the California provisions.

1. State-owned buildings, including buildings constructed by the Trustees of the California State University, and to the extent permitted by California laws, buildings designed and constructed by the

Regents of the University of California, and regulated by the Building Standards Commission. See Section 1.2.0 for additional scope provisions.

2. Section 1.3.0 is reserved for the Board of State and Community Corrections.
3. Section 1.4.0 is reserved for the Department of Consumer Affairs.
4. Section 1.5.0 is reserved for the California Energy Commission.
5. Section 1.6.0 is reserved for the Department of Food and Agriculture.
6. Organized camps, laboratory animal quarters, public swimming pools, radiation protection, commissaries serving mobile food preparation vehicles, and wild animal quarantine facilities regulated by the Department of Public Health. See Section 1.7.0 for additional scope provisions.
7. Hotels, motels, lodging houses, apartments, dwellings, dormitories, condominiums, shelters for homeless persons, congregate residences, employee housing, factory-built housing, and other types of dwellings containing sleeping accommodations with or without common toilets or cooking facilities. See Section 1.8.2.1.1 for additional scope provisions.
8. Accommodations for persons with disabilities in buildings containing newly constructed covered multifamily dwellings, new common use areas serving existing covered multifamily dwellings, additions to existing buildings where the addition alone meets the definition of covered multifamily dwellings, and new common use areas serving new covered multifamily dwellings which are regulated by the Department of Housing and Community Development. See Section 1.8.2.1.2 for additional scope provisions.
9. Permanent buildings and permanent accessory buildings or structures constructed within mobile-home parks and special occupancy parks regulated by the Department of Housing and Community Development. See Section 1.8.2.1.3 for additional scope provisions.
10. Accommodations for persons with disabilities regulated by the Division of the State Architect. See Section 1.9.1 for additional scope provisions.
11. Public elementary and secondary schools, community college buildings, and state-owned or state-leased essential service buildings regulated by the Division of the State Architect. See Section 1.9.2 for additional scope provisions.
12. Reserved for the State Historical Building Safety Board with the Division of the State Architect.

13. General acute care hospitals, acute psychiatric hospitals, skilled nursing and/or intermediate care facilities, clinics licensed by the Department of Public Health, and correctional treatment centers regulated by the Office of Statewide Health Planning and Development. See Section 1.10.0 for additional scope provisions.
14. Applications regulated by the Office of State Fire Marshal include but are not limited to following in accordance with Section 1.11.0:
 1. Buildings or structures used or intended for use as an:
 - 1.1 Asylum, jail, prison.
 - 1.2 Mental hospital, hospital, home for the elderly, children's nursery, children's home or institution, school or any similar occupancy of any capacity.
 - 1.3. Theater, dancehall, skating rink, auditorium, assembly hall, meeting hall, nightclub, fair building, or similar place of assemblage where 50 or more persons may gather together in a building, room or structure for the purpose of amusement, entertainment, instruction, deliberation, worship, drinking or dining, awaiting transportation, or education.
 - 1.4. Small family day care homes, large family day-care homes, residential facilities and residential facilities for the elderly, residential care facilities.
 - 1.5. State institutions or other state-owned or state-occupied buildings.
 - 1.6. High rise structures.
 - 1.7. Motion picture production studios.
 - 1.8. Organized camps.
 - 1.9. Residential structures.
 2. Tents, awnings or other fabric enclosures used in connection with any occupancy.
 3. Fire alarm devices, equipment and systems in connection with any occupancy.
 4. Hazardous materials, flammable and combustible liquids.
 5. Public school automatic fire detection, alarm and sprinkler systems.
 6. Wildland-urban interface fire areas.
15. Section 1.12.0 is reserved for public libraries constructed and renovated using funds from the California Library Construction and Renovation Bond Act of 1988 and regulated by the State Librarian.
16. Section 1.13.0 is reserved for the Department of Water Resources.
17. For applications listed in Section 1.9.1 regulated by the Division of the State Architect – Access Compliance, outdoor environments and uses shall be classified according to accessibility uses described in Chapter 11A, and 11B.

18. Section 1.14.0 is reserved for Marine Oil Terminals || regulated by the California State Lands Commission. ||

1.1.4 Appendices. Provisions contained in the appendices of this code shall not apply unless specifically adopted by a state agency or adopted by a local enforcing agency in compliance with Health and Safety Code Section 18901 et seq. for Building Standards Law, Health and Safety Code Section 17950 for State Housing Law and Health and Safety Code Section 13869.7 for Fire Protection Districts. See Section 1.1.8 of this code.

1.1.5 Referenced Codes. The codes, standards and publications adopted and set forth in this code, including other codes, standards and publications referred to therein are, by title and date of publication, hereby adopted as standard reference documents of this code. When this code does not specifically cover any subject related to building design and construction, recognized architectural or engineering practices shall be employed. The National Fire Codes, standards, and the Fire Protection Handbook of the National Fire Protection Association are permitted to be used as authoritative guides in determining recognized fire prevention engineering practices.

1.1.6 Non-Building Standards, Orders, and Regulations.

Requirements contained in the Uniform Plumbing Code, or in any other referenced standard, code or document, which are not building standards as defined in Health and Safety Code Section 18909 shall not be construed as part of the provisions of this code. For nonbuilding standards, orders, and regulations, see other titles of the California Code of Regulations.

1.1.7 Order of Precedence and Use.

1.1.7.1 Differences. In the event of any differences between these building standards and the standard reference documents, the text of these building standards shall govern.

1.1.7.2 Specific Provisions. Where a specific provision varies from a general provision, the specific provision shall apply.

1.1.7.3 Conflicts. When the requirements of this code conflict with the requirements of any other part of the California Building Standards Code, Title 24, the most restrictive requirements shall prevail.

Exception: Detached one-and two-family dwellings, efficiency dwelling units, lodging houses, live/work units, townhouses not more than three stories above grade plane with a separate means of egress, and their accessory structures, shall not be required to comply with the California Residential Code if constructed in accordance with the California Building Code. ||

1.1.8 City, County, or City and County Amendments, Additions or Deletions. The provisions of this code do not limit the authority of city, county, or city and county governments to establish more restrictive and reasonably necessary differences to the provisions contained in this code pursuant to complying with Section 1.1.8.1. The effective date of amendments, additions, or deletions to this code by city, county, or city and county filed pursuant to Section 1.1.8.1 shall be the

1.4.2 Adopting Agency Identification. The provisions of this code applicable to buildings identified in this section will be identified in the Matrix Adoption Tables under the acronym CA.

1.5.0 Reserved for California Energy Commission.

1.6.0 Department of Food and Agriculture.

1.6.1 Specific scope of application of the agency responsible for enforcement, the enforcement agency, and the specific authority to adopt and enforce such provisions of this code, unless otherwise stated.

Application – Dairies and places of meat and poultry inspection.

Enforcing Agency – Department of Food and Agriculture.

Authority Cited – Food and Agricultural Code Sections 18735, 18960, 19384, 33481, and 33731.

References – Food and Agricultural Code Sections 18735, 18960, 19384, 33481, and 33731.

1.6.2 Adopting Agency Identification. The provisions of this code applicable to buildings identified in this section will be identified in the Matrix Adoption Tables under the acronym AGR.

1.7.0 Department of Public Health.

1.7.1 Specific scope of application of the agency responsible for enforcement, the enforcement agency, and the specific authority to adopt and enforce such provisions of this code, unless otherwise stated.

Department of Public Health.

Application – Commissaries serving mobile food preparation units, food establishments, and organized camps.

Enforcing Agency – Department of Health Services and local health agency.

Authority Cited – Health and Safety Code Sections 18897.2, 110065, 113710, and 131200.

References – Health and Safety Code Sections 18897.2, 18897.4, 18897.7, 110065, 113705, 113710, and 131200.

1.7.2 Adopting Agency Identification.

The provisions of this code applicable to buildings identified in this section will be identified in the Matrix Adoption Tables under the acronym DPH.

1.8.0 Department of Housing and Community Development. [HCD]

1.8.1 Purpose. The purpose of this code is to establish minimum requirements to protect the health, safety, and general welfare of the occupants and the public by governing the erection, construction, reconstruction, enlargement, conversion, alteration, repair, moving, removal, demolition, sanitation, ventilation, and maintenance or use of plumbing equipment or systems.

1.8.2 Authority and Abbreviations.

1.8.2.1 General. The Department of Housing and Community Development is authorized by law to promulgate

and adopt building standards and regulations for several types of building applications. The applications under the authority of the Department of Housing and Community Development are listed in Sections 1.8.2.1.1 through 1.8.2.1.3.

1.8.2.1.1 Housing Construction.

Application – Hotels, motels, lodging houses, apartments, dwellings, dormitories, condominiums, shelters for homeless persons, congregate residences, employee housing, factory built housing, and other types of dwellings containing sleeping accommodations with or without common toilet or cooking facilities including accessory buildings, facilities, and uses thereto. Sections of this code which pertain to applications listed in this section are identified using the abbreviation “HCD 1”.

Enforcing Agency – Local building department or the Department of Housing and Community Development.

Authority Cited – Health and Safety Code Sections 17040, 17050, 17920.9, 17921, 17921.3, 17921.6, 17921.10, 17922, 17922.6, 17922.12, 17927, 17928, 17959.6, 18300, 18552, 18554, 18620, 18630, 18640, 18670, 18690, 18691, 18865, 18871.3, 18871.4, 18873, 18873.1, 18873.2, 18873.3, 18873.4, 18873.5, 18938.3, 18944.11, and 19990; and Government Code Section 12955.1.

References – Health and Safety Code Sections 17000 through 17062.5, 17910 through 17995.5, 18200 through 18700, 18860 through 18874, and 19960 through 19997; and Government Code Sections 12955.1 and 12955.1.1.

1.8.2.1.2 Housing Accessibility.

Application – Covered multifamily dwellings as defined in Chapter 2 of the California Code of Regulations, Title 24, Part 2, also known as the California Building Code including but not limited to lodging houses, dormitories, timeshares, condominiums, shelters for homeless persons, congregate residences, apartments, dwellings, employee housing, factory-built housing, and other types of dwellings containing sleeping accommodations with or without common toilet or cooking facilities.

Sections of this code identified by the abbreviation “HCD 1-AC” require specific accommodations for persons with disabilities, as defined in Chapter 2 of the California Building Code. The application of such provisions shall be in conjunction with other requirements of this code and apply only to newly constructed covered multifamily dwellings as defined in Chapter 2 of the California Building Code. “HCD 1-AC” applications include, but are not limited to, the following:

1. All newly-constructed covered multifamily dwellings, as defined in Chapter 2 of the California Building Code.
2. New common use areas, as defined in Chapter 2 of the California Building Code serving existing covered multifamily dwellings.

3. Additions to existing buildings, where the addition alone meets the definition of covered multifamily dwellings, as defined in Chapter 2 of the California Building Code.
4. Common use areas serving covered multifamily dwellings.
5. Where any portion of a building's exterior is preserved, but the interior of the building is removed, including all structural portions of floors and ceilings, the building is considered a new building for determining the application of CBC, Chapter 11A.

HCD 1-AC building standards generally do not apply to public use areas or public accommodations such as hotels, motels, and public housing. Public use areas, public accommodations, and housing as defined in Chapter 2 of the California Building Code are subject to the Division of the State Architect (DSA-AC) in Chapter 11B and are referenced in Section 1.9.1.

Newly constructed covered multifamily dwellings, which can also be defined as public housing, shall be subject to the requirements of Chapter 11A and Chapter 11B.

Enforcing Agency – Local building department or the Department of Housing and Community Development.

Authority Cited – Health and Safety Code Sections 17040, 17050, 17920.9, 17921, 17921.3, 17921.6, 17921.10, 17922, 17922.6, 17922.12, 17927, 17928, 17959.6, 18300, 18552, 18554, 18620, 18630, 18640, 18670, 18690, 18691, 18865, 18871.3, 18871.4, 18873, 18873.1, 18873.2, 18873.3, 18873.4, 18873.5, 18938.3, 18944.11, and 19990; and Government Code Section 12955.1.

References – Health and Safety Code Sections 17000 through 17062.5, 17910 through 17995.5, 18200 through 18700, 18860 through 18874, and 19960 through 19997; and Government Code Sections 12955.1 and 12955.1.1.

1.8.2.1.3 Permanent Buildings in Mobilehome Parks and Special Occupancy Parks.

Application – Permanent buildings, and permanent accessory buildings or structures, constructed within mobilehome parks and special occupancy parks that are under the control and ownership of the park operator. Sections of this code which pertain to applications listed in this section are identified using the abbreviation “HCD 2”.

Enforcing Agency – Local building department or other local agency responsible for the enforcement of Health and Safety Code Division 13, Part 2.1, commencing with Section 18200 for mobilehome parks and Health and Safety Code, Division 13, Part 2.3, commencing with Section 18860 for special occupancy parks; or the Department of Housing and Community Development.

Authority Cited – Health and Safety Code Sections 17040, 17050, 17920.9, 17921, 17921.3, 17921.6,

17921.10, 17922, 17922.6, 17922.12, 17927, 17928, 17959.6, 18300, 18552, 18554, 18620, 18630, 18640, 18670, 18690, 18691, 18865, 18871.3, 18871.4, 18873, 18873.1, 18873.2, 18873.3, 18873.4, 18873.5, 18938.3, 18944.11, and 19990; and Government Code Section 12955.1.

References – Health and Safety Code Sections 17000 through 17062.5, 17910 through 17995.5, 18200 through 18700, 18860 through 18874, and 19960 through 19997; and Government Code Sections 12955.1 and 12955.1.1.

1.8.3 Local Enforcing Agency.

1.8.3.1 Duties and Powers. The building department of every city, county, or city and county shall enforce all the provisions of law, this code, and the other rules and regulations promulgated by the Department of Housing and Community Development pertaining to the installation, erection, construction, reconstruction, movement, enlargement, conversion, alteration, repair, removal, demolition, or arrangement of apartments, condominiums, hotels, motels, lodging houses and dwellings, including accessory buildings, facilities, and uses thereto.

The provisions regulating the erection and construction of dwellings and appurtenant structures shall not apply to existing structures as to which construction is commenced or approved prior to the effective date of these regulations. Requirements relating to use, maintenance and occupancy shall apply to all dwellings and appurtenant structures approved for construction or constructed before or after the effective date of this code.

For additional information regarding the use and occupancy of existing buildings and appurtenant structures, see California Code of Regulations, Title 25, Division 1, Chapter 1, Subchapter 1, commencing with Section 1.

1.8.3.2 Laws, Rules, and Regulations. Other than the building standards contained in this code, and notwithstanding other provisions of law, the statutory authority and location of the laws, rules, and regulations to be enforced by local enforcing agencies are listed by statute in Sections 1.8.3.2.1 through 1.8.3.2.5 below:

1.8.3.2.1 State Housing Law. Refer to the State Housing Law, California Health and Safety Code, Division 13, Part 1.5, commencing with Section 17910 and California Code of Regulations, Title 25, Division 1, Chapter 1, Subchapter 1, commencing with Section 1, for the erection, construction, reconstruction, movement, enlargement, conversion, alteration, repair, removal, demolition, or arrangement of apartments, condominiums, hotels, motels, lodging houses and dwellings, including accessory buildings, facilities, and uses thereto.

1.8.3.2.2 Mobilehome Parks Act. Refer to the Mobilehome Parks Act, California Health and Safety Code, Division 13, Part 2.1, commencing with Section 18200 and California Code of Regulations, Title 25, Division 1, Chapter 2, commencing with Section 1000 for mobilehome park administra-

For additional information regarding approval of alternates by a local building department pursuant to the State Housing Law, see California Health and Safety Code Section 17951(e) and California Code of Regulations, Title 25, Division 1, Chapter 1, Subchapter 1.

1.8.7.3 Department of Housing and Community Development. The Department of Housing and Community Development may approve alternates for use in the erection, construction, reconstruction, movement, enlargement, conversion, alteration, repair, removal, or demolition of apartments, condominiums, hotels, motels, lodging houses, dwellings, or accessory structures thereto. The consideration and approval of alternates shall comply with the following:

1. The department may require tests at the expense of the owner or owner's agent to substantiate compliance with the California Building Standards Code.
2. The approved alternate shall, for its intended purpose, be at least equivalent in performance and safety to the materials, designs, tests, or methods of construction prescribed by this code.

1.8.8 Appeals Board.

1.8.8.1 General. Every city, county, or city and county shall establish a process to hear and decide appeals of orders, decisions, and determinations made by the enforcing agency relative to the application and interpretation of this code and other regulations governing construction use, maintenance and change of occupancy. The governing body of any city, county, or city and county may establish a local appeals board and a housing appeals board to serve this purpose. Members of the appeals board(s) shall not be employees of the enforcing agency and shall be knowledgeable in the applicable building codes, regulations and ordinances as determined by the governing body of the city, county, or city and county.

Where no such appeals boards or agencies have been established, the governing body of the city, county, or city and county shall serve as the local appeals board or housing appeals board as specified in California Health and Safety Code Sections 17920.5 and 17920.6.

1.8.8.2 Definitions. The following terms shall for the purposes of this section have the meaning shown.

Housing Appeals Board. The board or agency of a city, county or city and county which is authorized by the governing body of the city, county, or city and county to hear appeals regarding the requirements of the city, county, or city and county relating to the use, maintenance, and change of occupancy of buildings and structures, including requirements governing alteration, additions, repair, demolition, and moving. In any area in which there is no such board or agency, "housing appeals board" means the local appeals board having jurisdiction over the area.

Local Appeals Board. The board or agency of a city, county, or city and county which is authorized by the gov-

erning body of the city, county, or city and county to hear appeals regarding the building requirements of the city, county, or city and county. In any area in which there is no such board or agency, "local appeals board" means the governing body of the city, county, or city and county having jurisdiction over the area.

1.8.8.3 Appeals. Except as otherwise provided by law, any person, firm, or corporation adversely affected by a decision, order, or determination by a city, county, or city and county relating to the application of building standards published in the California Building Standards Code, or any other applicable rule or regulation adopted by the Department of Housing and Community Development, or any lawfully enacted ordinance by a city, county, or city and county, may appeal the issue for resolution to the local appeals board or housing appeals board as appropriate.

The local appeals board shall hear appeals relating to new building construction and the housing appeals board shall hear appeals relating to existing buildings.

1.8.9 Unsafe Buildings or Structures.

1.8.9.1 Authority to Enforce. Subject to other provisions of law, the administration, enforcement, actions, proceedings, abatement, violations, and penalties for unsafe buildings and structures are contained in the following statutes and regulations:

1. For applications subject to State Housing Law as referenced in Section 1.8.3.2.1 of this code, refer to Health and Safety Code, Division 13, Part 1.5, commencing with Section 17910 and California Code of Regulations, Title 25, Division 1, Chapter 1, Subchapter 1, commencing with Section 1.
2. For applications subject to the Mobilehome Parks Act as referenced in Section 1.8.3.2.2 of this code, refer to Health and Safety Code, Division 13, Part 2.1, commencing with Section 18200 and California Code of Regulations, Title 25, Division 1, Chapter 2, commencing with Section 1000.
3. For applications subject to the Special Occupancy Parks Act as referenced in Section 1.8.3.2.3 of this code, refer to Health and Safety Code, Division 13, Part 2.3, commencing with Section 18860 and California Code of Regulations, Title 25, Division 1, Chapter 2.2, commencing with Section 2000.
4. For applications subject to the Employee Housing Act as referenced in Section 1.8.3.2.4 of this code, refer to Health and Safety Code, Division 13, Part 1, commencing with Section 17000 and California Code of Regulations, Title 25, Division 1, Chapter 1, Subchapter 3, commencing with Section 600.
5. For applications subject to the Factory-Built Housing Law as referenced in Section 1.8.3.2.5 of this code, refer to Health and Safety Code, Division 13, Part 6, commencing with Section 19960 and California Code of Regulations, Title 25, Division 1, Chapter 3, Subchapter 1, commencing with Section 3000.

1.8.9.2 Actions and Proceedings. Subject to other provisions of law, punishments, penalties, and fines for violations of building standards are contained in the following statutes and regulations:

1. For applications subject to the State Housing Law as referenced in Section 1.8.3.2.1 of this code, refer to Health and Safety Code, Division 13, Part 1.5, commencing with Section 17910 and California Code of Regulations, Title 25, Division 1, Chapter 1, Subchapter 1, commencing with Section 1.
2. For applications subject to the Mobilehome Parks Act as referenced in Section 1.8.3.2.2 of this code, refer to Health and Safety Code, Division 13, Part 2.1, commencing with Section 18200 and California Code of Regulations, Title 25, Division 1, Chapter 2, commencing with Section 1000.
3. For applications subject to the Special Occupancy Parks Act as referenced in Section 1.8.3.2.3. of this code, refer to Health and Safety Code, Division 13, Part 2.3, commencing with Section 18860 and California Code of Regulations, Title 25, Division 1, Chapter 2.2, commencing with Section 2000.
4. For applications subject to the Employee Housing Act as referenced in Section 1.8.3.2.4 of this code, refer to Health and Safety Code, Division 13, Part 1, commencing with Section 17000 and California Code of Regulations, Title 25, Division 1, Chapter 1, Subchapter 3, commencing with Section 600.
5. For applications subject to the Factory-Built Housing Law as referenced in Section 1.8.3.2.5 of this code, refer to Health and Safety Code, Division 13, Part 6, commencing with Section 19960 and California Code of Regulations, Title 25, Division 1, Chapter 3, Subchapter 1, commencing with Section 3000.

1.8.10 Other Building Regulations.

1.8.10.1 Existing Structures. Notwithstanding other provisions of law, the replacement, retention, and extension of original materials and the use of original methods of construction for any existing building or accessory structure, or portions thereof, shall be permitted in accordance with the provisions of this code and the California Existing Building Code, as adopted by the Department of Housing and Community Development. For additional information, see California Health and Safety Code Sections 17912, 17920.3, 17922 and 17958.8.

1.8.10.2 Moved Structures. Subject to the requirements of California Health and Safety Code Sections 17922, 17922.3 and 17958.9, local ordinances or regulations relating to a moved residential building or accessory structure thereto, shall permit the replacement, retention, and extension of original materials and the use of original methods of construction so long as the structure does not become or continue to be a substandard building.

Note:

Authority Cited – Health and Safety Code Sections 17040, 17050, 17920.9, 17921, 17921.3, 17921.6, 17921.10, 17922, 17922.6, 17922.12, 17927, 17928, 17959.6, 18300, 18552, 18554, 18620, 18630, 18640, 18670, 18690, 18691, 18865, 18871.3, 18871.4, 18873, 18873.1, 18873.2, 18873.3, 18873.4, 18873.5, 18938.3, 18944.11, and 19990; and Government Code Section 12955.1.

References – Health and Safety Code Sections 17000 through 17062.5, 17910 through 17995.5, 18200 through 18700, 18860 through 18874, and 19960 through 19997; and Government Code Sections 12955.1 and 12955.1.1.

1.9.0 Division of the State Architect.

1.9.1 Division of the State Architect – Access Compliance. **Note:** Buildings or facilities where accessibility is required for applications listed in California Code of Regulations, Title 24, Part 2 (California Building Code), Chapter 1, Section 1.9.1 regulated by the Division of the State Architect–Access Compliance shall comply with Title 24, Part 2, Chapter 11A or 11B, as applicable under authority cited by CA Government Code Section 4450 and in reference cited by CA Government Code Sections 4450 through 4461, 12955.1(c), and CA Health and Safety Code Sections 18949.1, 19952 through 19959.

1.9.1.1 Adopting Agency Identification.

The provisions of this code applicable to buildings identified in this Subsection 1.9.1 will be identified in the Matrix Adoption Tables under the acronym DSA-AC.

1.9.2 Division of the State Architect – Structural Safety.

1.9.2.1 DSA-SS (Division of the State Architect – Structural Safety).

Application – Public elementary and secondary schools, community college buildings, and state-owned or state-leased essential services buildings.

Enforcing Agency – Division of the State Architect – Structural Safety (DSA-SS).

The Division of the State Architect has been delegated the responsibility and authority by the Department of General Services to review and approve the design and observe the construction of public elementary and secondary schools, community colleges, and state-owned or state-leased essential services buildings.

Authority Cited – Education Code Section 17310 and 81142, and Health and Safety Code Section 16022.

References – Education Code Sections 17280 through 17317 and 81130 through 81147, and Health and Safety Code Sections 16000 through 16023.

1.9.2.1.1 Adopting Agency Identification.

The provisions of this code applicable to buildings identified in this Subsection 1.9.2 will be identified in the Matrix Adoption Tables under the acronym DSA-SS.

1.9.2.2 DSA-SS/CC (Division of the State Architect – Structural Safety/Community Colleges).

Application – Community Colleges.

The Division of the State Architect has been delegated the authority by the Department of General Services to promulgate alternate building standards for application to community colleges, which a community college may elect to use in lieu of standards promulgated by DSA-SS in accordance with Section 1.9.2.1. Refer to Title 24, Part 2, Section 1.9.2.2.

Enforcing Agency – Division of the State Architect – Structural Safety/Community Colleges (DSA-SS/CC).

CALIFORNIA PLUMBING CODE. MATRIX ADOPTION TABLE
CHAPTER 2 - DEFINITIONS

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

Adopting Agency	BSC	BSC-CG	SFM	HCD			DSA			OSHPD				BSCC	DPH	AGR	DWR	CEC	CA	SL	SLC
				1	2	1-AC	AC	SS	SS/CC	1	2	3	4								
Adopt Entire Chapter			X																		
Adopt Entire Chapter as amended (amended sections listed below)	X			X	X	X		X	X	X	X	X	X								
Adopt only those sections that are listed below																		X			
Chapter/Section																					
203.0				X	X			X	X												
204.0					X	X															
205.0	X			X		X													X		
206.0	X				X	X	X														
207.0	X			X	X	X															
208.0																			X		
209.0	X			X																	
210.0											X	X	X	X							
211.0	X				X																
214.0					X	X															
215.0	X				X																
216.0						X	X														
217.0	X				X																
220.0	X				X																
221.0	X				X						X	X	X	X							
222.0	X				X						X	X	X	X							
223.0						X													X		
225.0						X															

This state agency does not adopt sections identified with the following symbol: †

The Office of the State Fire Marshal's adoption of this chapter or individual sections is applicable to structures regulated by other state agencies pursuant to Section 1.11.

205.0

- C -

Category 1. Facility systems in which failure of such equipment or system is likely to cause major injury or death of patients or caregivers. [NFPA 99:4.1.1]

Category 2. Facility systems in which failure of such equipment is likely to cause minor injury to patients or caregivers. [NFPA 99:4.1.2]

Category 3. Facility systems in which failure of such equipment is not likely to cause injury to patients or caregivers, but can cause patient discomfort. [NFPA 99:4.1.3]

Category 3 Medical Vacuum System. A medical vacuum distribution system that can be either a wet system designed to remove liquids, air-gas, or solids from the treated area; or a dry system designed to trap liquids and solids before the service inlet and to accommodate air-gas only through the service inlet. [NFPA 99:3.3.23]

Certified Backflow Assembly Tester. A person who has shown competence to test and maintain backflow assemblies to the satisfaction of the Authority Having Jurisdiction.

Cesspool. A lined excavation in the ground that receives the discharge of a drainage system or part thereof, so designed as to retain the organic matter and solids discharging therein, but permitting the liquids to seep through the bottom and sides.

Chemical Waste. See Special Wastes.

Chimney. One or more passageways, vertical or nearly so, for conveying flue or vent gases to the outdoors. [NFPA 54:3.3.18]

Chimney, Factory-Built. A chimney composed of listed factory-built components assembled in accordance with the manufacturer's installation instructions to form the completed chimney. [NFPA 54:3.3.18.2]

Chimney, Masonry. A field-constructed chimney of solid masonry units, bricks, stones, listed masonry chimney units, or reinforced portland cement concrete, lined with suitable chimney flue liners. [NFPA 54:3.3.18.3]

Chimney, Metal. A chimney constructed of metal with a minimum thickness not less than 0.127 inch (3.23 mm) (No. 10 manufacturer's standard gauge) steel sheet.

Chimney Classifications:

Chimney, High-Heat Appliance-Type. A factory-built, masonry, or metal chimney suitable for removing the products of combustion from fuel-burning high-heat appliances producing combustion gases in excess of 2000°F (1093°C), measured at the appliance flue outlet.

Chimney, Low-Heat Appliance-Type. A factory-built, masonry, or metal chimney suitable for removing the products of combustion from fuel-burning low-heat appliances producing combustion gases not in excess of 1000°F (538°C) under normal operating conditions, but capable of producing combustion gases of 1400°F (760°C) during intermittent forced firing for periods up to one hour. Temperatures are measured at the appliance flue outlet.

Chimney, Medium-Heat Appliance-Type. A factory-built, masonry, or metal chimney suitable for removing the products of combustion from fuel-burning medium-

heat appliances producing combustion gases not in excess of 2000°F (1093°C), measured at the appliance flue outlet.

Chimney, Residential Appliance-Type. A factory-built or masonry chimney suitable for removing products of combustion from residential-type appliances producing combustion gases not in excess of 1000°F (538°C), measured at the appliance flue outlet. Factory-built Type HT chimneys have high-temperature thermal shock resistance.

Clarifier. See Interceptor (Clarifier).

Clear Water Waste. Cooling water and condensate drainage from refrigeration and air-conditioning equipment; cooled condensate from steam heating systems; and cooled boiler blowdown water.

Clinical Sink. A fixture that has the same flushing and cleansing characteristics of a water closet that is used to receive the wastes from a bedpan. Also known as a bedpan washer.

Clothes Washer System [HCD 1]. A gray water system utilizing only a single domestic clothes washing machine in a one- or two family dwelling.

Coastal High Hazard Areas. An area within the flood hazard area that is subject to high velocity wave action, and shown on a Flood Insurance Rate Map or other flood hazard map as Zone V, VO, VE or V1-30.

Code. A standard that is an extensive compilation of provisions covering broad subject matter or that is suitable for adoption into law independently of other codes and standards.

Combination Temperature and Pressure-Relief Valve. A relief valve that actuates when a set temperature, pressure, or both is reached. Also known as a T&P Valve.

Combination Thermostatic/Pressure Balancing Valve. A mixing valve that senses outlet temperature and incoming hot and cold water pressure and compensates for fluctuations in incoming hot and cold water temperatures, pressures, or both to stabilize outlet temperatures.

Combination Waste and Vent System. A specially designed system of waste piping embodying the horizontal wet venting of one or more sinks or floor drains by means of a common waste and vent pipe, adequately sized to provide free movement of air above the flow line of the drain.

Combined Building Sewer. See Building Sewer (Combined).

Combustible Material. As pertaining to materials adjacent to or in contact with heat-producing appliances, vent connectors, gas vents, chimneys, steam and hot water pipes, and warm air ducts, materials made of or surfaced with wood, compressed paper, plant fibers, or other materials that are capable of being ignited and burned. Such material shall be considered combustible even though flame-proofed, fire-retardant treated, or plastered. [NFPA 54:3.3.67.1]

Commissaries Serving Mobile Food Preparation Units [DPH]. A food establishment in which food, containers, equipment or supplies are stored or handled for use in vehicles, mobile food preparation units, food carts or vending machines.

DEFINITIONS

Common. That part of a plumbing system that is so designed and installed as to serve more than one appliance, fixture, building, or system.

Complex System [BSC, HCD 1]. Gray water systems that discharge over 250 gallons (947 L) per day.

Condensate. The liquid phase produced by condensation of a particular gas or vapor.

Conductor. A pipe inside the building that conveys storm water from the roof to a storm drain, combined building sewer, or other approved point of disposal.

Confined Space. A room or space having a volume less than 50 cubic feet per 1000 British thermal units per hour (Btu/h) (4.83 m³/kW) of the aggregate input rating of all fuel-burning appliances installed in that space.

Construction Documents. Plans, specifications, written, graphic, and pictorial documents prepared or assembled for describing the design, location, and physical characteristics of the elements of a project necessary for obtaining a permit.

Contamination. An impairment of the quality of the potable water that creates an actual hazard to the public health through poisoning or through the spread of disease by sewage, industrial fluids, or waste. Also defined as High Hazard.

Continuous Vent. A vertical vent that is a continuation of the drain to which it connects.

Continuous Waste. A drain connecting the compartments of a set of fixtures to a trap or connecting other permitted fixtures to a common trap.

Covered Multifamily Dwellings [HCD 1-AC]. See Section 1.8.2.1.2.

Copper Alloy. A homogenous mixture of two or more metals in which copper is the primary component, such as brass and bronze.

CPVC. Chlorinated Polyvinyl Chloride.

Critical Care Area. See Patient Care Room. [NFPA 99:3.3.31]

Critical Level. The critical level (C-L or C/L) marking on a backflow prevention device or vacuum breaker is a point conforming to approved standards and established by the testing laboratory (usually stamped on the device by the manufacturer) that determines the minimum elevation above the flood-level rim of the fixture or receptor served at which the device may be installed. Where a backflow prevention device does not bear a critical level marking, the bottom of the vacuum breaker, combination valve, or the bottom of such approved device shall constitute the critical level.

Cross-Connection. A connection or arrangement, physical or otherwise, between a potable water supply system and a plumbing fixture or a tank, receptor, equipment, or device, through which it may be possible for nonpotable, used, unclean, polluted, and contaminated water, or other substances to enter into a part of such potable water system under any condition.

206.0

- D -

Debris Excluder. A device installed on the rainwater catchment conveyance system to prevent the accumulation of leaves, needles, or other debris in the system.

Department [HCD 1, HCD 2 and HCD 1-AC]. "Department" means the Department of Housing and Community Development.

Department Having Jurisdiction. The Authority Having Jurisdiction, including any other law enforcement agency affected by a provision of this code, whether such agency is specifically named or not.

[HCD 1 & HCD 2] "Department Having Jurisdiction" shall mean "Enforcing Agency" as defined in Section 207.0 of this code.

Design Flood Elevation. The elevation of the "design flood," including wave height, relative to the datum specified on the community's legally designated flood hazard map. In areas designated as Zone AO, the design flood elevation is the elevation of the highest existing grade of the building's perimeter plus the depth number (in feet) specified on the flood hazard map. In areas designated as Zone AO where a depth number is not specified on the map, the depth number is taken as being equal to 2 feet (610 mm).

Developed Length. The length along the center line of a pipe and fittings.

Diameter. Unless specifically stated, "diameter" is the nominal diameter as designated commercially.

Direct-Vent Appliances. Appliances that are constructed and installed so that air for combustion is derived directly from the outdoors and flue gases are discharged to the outdoors. [NFPA 54:3.3.6.3]

Disposal Field [BSC & HCD 1]. An intended destination for gray water, including but not limited to, a mulch basin or receiving landscape feature, gray water leach field, or other approved method of disposal.

Domestic Sewage. The liquid and water-borne wastes derived from the ordinary living processes, free from industrial wastes, and of such character as to permit satisfactory disposal, without special treatment, into the public sewer or by means of a private sewage disposal system.

Downspout. The rain leader from the roof to the building storm drain, combined building sewer, or other means of disposal located outside of the building. See Conductor and Leader.

Drain. A pipe that carries waste or waterborne wastes in a building drainage system.

Drainage System. Includes all the piping within public or private premises that conveys sewage, storm water, or other liquid wastes to a legal point of disposal, but does not include the mains of a public sewer system or a public sewage treatment or disposal plant.

Drinking Fountain. A plumbing fixture connected to the potable water distribution system and sanitary drainage system that provides drinking water in a flowing stream so that the user can consume water directly from the fixture without the use of accessories. Drinking fountains should also incorporate a bottle filling station, and can incorporate a water filter and a cooling system for chilling the drinking water.

Dry Vent. A vent that does not receive the discharge of any sewage or waste.

Durham System. A soil or waste system in which all piping is threaded pipe, tubing, or other such rigid construction, using recessed drainage fittings to correspond to the types of piping.

207.0

- E -

Effective Ground-Fault Current Path. An intentionally constructed, low-impedance electrically conductive path designed and intended to carry current under ground-fault conditions from the point of a ground fault on a wiring system to the electrical supply source and that facilitates the operation of the overcurrent protective device or ground-fault detectors on high-impedance grounded systems. [NFPA 54:3.3.36]

Effective Opening. The minimum cross-sectional area at the point of water supply discharge measured or expressed in terms of: (1) diameter of a circle or (2) where the opening is not circular, the diameter of a circle of equivalent cross-sectional area. (This is applicable to an air gap)

Enforcing Agency [BSC, HCD 1, HCD 2, and HCD 1-AC]. "Enforcing Agency" is the designated department or agency as specified by statute or regulation.

Essentially Nontoxic Transfer Fluid. Essentially nontoxic at practically nontoxic, Toxicity Rating Class 1 (reference "Clinical Toxicology of Commercial Products" by Gosselin, Smith, Hodge, & Braddock).

Exam Room Sink. A sink used in the patient exam room of a medical or dental office with a primary purpose for the washing of hands.

Excess Flow Valve (EFV). A valve designed to activate where the fuel gas passing through it exceeds a prescribed flow rate. [NFPA 54:3.3.104.3]

Existing Work. A plumbing system or any part thereof that has been installed prior to the effective date of this code.

Expansion Joint. A fitting or arrangement of pipe and fittings that permits the contraction and expansion of a piping system.

208.0

- F -

F Rating. The time period that the penetration firestop system limits the spread of fire through the penetration, where tested in accordance with ASTM E814 or UL 1479.

Fixture Branch. A water supply pipe between the fixture supply pipe and the water distribution pipe.

Fixture Drain. The drain from the trap of a fixture to the junction of that drain with any other drain pipe.

Fixture Fitting. A device that controls and guides the flow of water.

Fixture Supply. A water supply pipe connecting the fixture with the fixture branch.

Fixture Unit. A quantity in terms of which the load-producing effects on the plumbing system of different kinds of plumbing fixtures are expressed on some arbitrarily chosen scale.

Flammable Vapor or Fumes. The concentration of flammable constituents in air that exceeds 25 percent of its lower flammability limit (LFL).

Flood Hazard Area. The greater of the following two areas:

- (1) The area within a floodplain subject to a 1 percent or greater chance of flooding in any given year.
- (2) The area designated as a flood hazard area on a community's flood hazard map, or otherwise legally designated.

Flood Level. See Flooded.

Flood-Level Rim. The top edge of a receptor from which water overflows.

Flooded. A fixture is flooded where the liquid therein rises to the flood-level rim.

Flue Collar. That portion of an appliance designed for the attachment of a draft hood, vent connector, or venting system. [NFPA 54:3.3.46]

Flush Tank. A tank located above or integral with water closets, urinals, or similar fixtures for the purpose of flushing the usable portion of the fixture.

Flush Valve. A valve located at the bottom of a tank for the purpose of flushing water closets and similar fixtures.

Flushometer Tank. A tank integrated within an air accumulator vessel that is designed to discharge a predetermined quantity of water to fixtures for flushing purposes.

Flushometer Valve. A valve that discharges a predetermined quantity of water to fixtures for flushing purposes and is actuated by direct water pressure.

FOG Disposal System. A grease interceptor that reduces nonpetroleum fats, oils, and grease (FOG) in effluent by separation, mass, and volume reduction.

Food Establishment [DPH]. Any room, building, place or portion thereof, maintained, used or operated for purpose of storing, preparing, serving, packaging, transporting, salvaging or otherwise handling food at the retail level.

Fuel Gas. Natural, manufactured, liquefied petroleum, or a mixture of these.

Fuel Gas Quick-Disconnect. A hand-operated device that provides a means for connecting and disconnecting an appliance or an appliance connector to a gas supply and that is equipped with an automatic means to shut off the gas supply where the device is disconnected. [NFPA 54:3.3.29.3]

Fuel Gas Vent. A listed factory-made vent pipe and vent fittings for conveying flue gases to the outdoors.

Fuel Gas Venting System. A continuous open passageway from the flue collar or draft hood of an appliance to the outdoors for the purpose of removing flue or vent gases. [NFPA 54:3.3.99.7]

DEFINITIONS

209.0 – G –

Gang or Group Shower. Two or more showers in a common area.

Gas Piping. An installation of pipe, valves, or fittings that is used to convey fuel gas, installed on a premises or in a building, but shall not include:

- (1) A portion of the service piping.
- (2) An approved piping connection 6 feet (1829 mm) or less in length between an existing gas outlet and a gas appliance in the same room with the outlet.

Gas Piping System. An arrangement of gas piping or regulators after the point of delivery and each arrangement of gas piping serving a building, structure, or premises, whether individually metered or not.

General Care Areas. See Patient Care Room. [NFPA 99:3.3.64]

Governing Body. The person or persons who have the overall legal responsibility for the operation of a health care facility. [NFPA 99:3.3.65]

Grade. The slope or fall of a line of pipe in reference to a horizontal plane. In drainage, it is usually expressed as the fall in a fraction of an inch (mm) or percentage slope per foot (meter) length of pipe.

Gravity Grease Interceptor. A plumbing appurtenance or appliance that is installed in a sanitary drainage system to intercept nonpetroleum fats, oils, and greases (FOG) from a wastewater discharge and is identified by volume, 30 minute retention time, baffle(s), not less than two compartments, a total volume of not less than 300 gallons (1135 L), and gravity separation. [These interceptors comply with the requirements of Chapter 10 or are designed by a registered design professional.] Gravity grease interceptors are generally installed outside.

→ **Graywater [BSC & HCD 1].** Pursuant to Health and Safety Code Section 17922.12, "graywater" means untreated wastewater that has not been contaminated by any toilet discharge, has not been affected by infectious, contaminated, or unhealthy bodily wastes, and does not present a threat from contamination by unhealthful processing, manufacturing, or operating wastes. "Graywater" includes, but is not limited to, wastewater from bathtubs, showers, bathroom washbasins, clothes washing machines, and laundry tubs, but does not include wastewater from kitchen sinks or dishwashers.

Note: For the purpose of applying the standards contained in this code, "Graywater" as defined above, has the same meaning as "gray water", "grey water", and "greywater".

Gray Water System [BSC]. A system designed to collect gray water to be treated on-site for reuse or distribution to an irrigation or disposal field. A gray water system may include, on-site treated nonpotable water devices or equipment, tanks, valves, filters, pumps or other appurtenances along with piping and receiving landscape.

Gray Water System [HCD 1]. A system designed to collect gray water on-site for reuse or distribution to an irrigation or disposal field. A gray water system may include, on-site

treated nonpotable water devices or equipment, tanks, valves, filters, pumps or other appurtenances along with piping and receiving landscape.

← **Grease Interceptor.** A plumbing appurtenance or appliance that is installed in a sanitary drainage system to intercept non-petroleum fats, oil, and greases (FOG) from a wastewater discharge.

Grease Removal Device (GRD). A hydromechanical grease interceptor that automatically, mechanically removes non-petroleum fats, oils and grease (FOG) from the interceptor, the control of which are either automatic or manually initiated.

Grounding Electrode. A conducting object through which a direct connection to earth is established. [NFPA 70:100(I)]

210.0 – H –

Handwashing Fixture [OSHPD 1, 2, 3 & 4]. Handwash fixtures consist of faucet, trim and sink as described:

- (1) **Faucets and Trim**
 - a. Hand washing fixtures used by medical and nursing staff, patients, and food handlers shall be trimmed with valves that can be operated without the use of hands.
 - i. Wrist or elbow blades shall be permitted unless otherwise noted in Table 4-2.
 - ii. Blade handles used for this purpose shall be at least 4 inches (102 mm) in length.
 - b. Sensor operated fixtures shall be capable of functioning during loss of normal power.
 - c. Faucets shall not be equipped with an aerator but may be equipped with a non-aerating laminar flow device.
 - d. **Temperature Control(s)**
 - i. When deck-mounted temperature controls are provided, they shall be equipped with wrist blades at least 4 inches (102 mm) in length or be sensor operated.
 - ii. When faucet-mounted temperature controls are provided, they shall be sensor operated.
 - e. Faucets shall be equipped with gooseneck spouts. A gooseneck spout is a deck or fixture-mounted spout so the discharge point of the spout return is at least 5 inches (127 mm) above the fixture rim.
- (2) **Sinks**
 - a. Sinks in hand-washing fixtures shall be designed and installed to prevent splashing outside of the sink.
 - b. Sinks shall have well-fitted and sealed basins to prevent water leaks onto or into the cabinetry or wall spaces.
 - c. Design of sinks and cabinetry shall not permit storage beneath the sink basin.

Hangers. See Supports.

Heat-Fusion Weld Joints. A joint used in some thermoplastic systems to connect pipe to fittings or pipe lengths directly to one another (butt-fusion). This method of joining pipe to fittings includes socket-fusion, electro-fusion, and saddle-fusion. This method of welding involves the application of heat and pressure to the components, allowing them to fuse together forming a bond between the pipe and fitting.

CALIFORNIA PLUMBING CODE – MATRIX ADOPTION TABLE
CHAPTER 3 - GENERAL REGULATIONS

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

Adopting Agency	BSC	BSC-CG	SFM	HCD			DSA			OSHPD				BSCC	DPH	AGR	DWR	CEC	CA	SL	SLC
				1	2	1-AC	AC	SS	SS/CC	1	2	3	4								
Adopt Entire Chapter	X																				
Adopt Entire Chapter as amended (amended sections listed below)			X	X	X			X	X	X	X	X	X								
Adopt only those sections that are listed below																					
Chapter/Section																					
301.3				X																	
301.3.1				†	†																
301.3.1.1				†	†																
301.3.1.2				†	†																
301.4.1				X	X			X	X												
301.6					X																
303.1 <i>Exception</i>				X																	
304.1 <i>Exception</i>				X																	
310.9										X	X	X	X								
310.10										X		X	X								
310.11			X																		
310.12										X	X		X								
312.2				X	X			X	X												
312.7			X	X	X			X	X												
312.11				X	X			X	X												
313.8										X	X	X	X								
319.0										X	X	X	X								
321.0										X	X	X	X								

This state agency does not adopt sections identified with the following symbol: †

The Office of the State Fire Marshal's adoption of this chapter or individual sections is applicable to structures regulated by other state agencies pursuant to Section 1.11.

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 code user. See Chapter 1 for state agency authority and building applications.)

Adopting Agency	BSC	BSC-CG	SFM	HCD			DSA			OSHPD				BSCC	DPH	AGR	DWR	CEC	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															
401.3	X			X				X	X	X	X	X	X								
403.1						X															
403.2						X															
407.2.1				X																	
407.2.1.1				X																	
407.2.1.2				X																	
407.2.1.3				X	X																
407.2.2.1	X							X	X												
408.2				X																	
408.2.1	X							X	X												
408.2.2	X							X	X												
408.5 & Exception 1				X																	
408.6 & Exception 1, 3						X															
411.2				X	X																
411.2.2				X	X																
411.2.3				†	†																
411.2.3.1	X							X	X										X		
411.2.4	X							X	X										X		
412.1				X	X																
412.1.1	X							X	X												
412.1.2	X							X	X												
412.1.3				X	X																
413.2														X	X	X	X				
415.1				X																	
417.1.1	X							X	X												
417.1.2	X							X	X												
420.2.1	X							X	X												

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

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

Adopting Agency	BSC	BSC-CG	SFM	HCD			DSA			OSHPD				BSCC	DPH	AGR	DWR	CEC	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																					
422.1	X			X	X					X	X	X	X								
Table 422.1	X			X	X	X	X	X	X	X	X	X	X								
422.1.2							X														
422.2				†	†																
422.2.2										X	X	X	X								
422.4				†	†																
422.5				†	†																
422.6																			X		
422.7																			X		
422.8																		X			
422.9																		X			
Table A	X							X	X												
Table 4-2										X	X	X	X								
Table 4-3	X																X				
Table 4-4	X																X				

This state agency does not adopt sections identified with the following symbol: †

The Office of the State Fire Marshal's adoption of this chapter or individual sections is applicable to structures regulated by other state agencies pursuant to Section 1.11.

CHAPTER 4

PLUMBING FIXTURES AND FIXTURE FITTINGS

Note: In addition to the requirements of this chapter, buildings or facilities where accessibility is required for applications listed in California Code of Regulations, Title 24, Part 2 (California Building Code), Chapter 1, Section 1.9.1 regulated by the Division of the State Architect—Access Compliance shall also comply with Title 24, Part 2, Chapter 11A or 11B, as applicable under authority cited by CA Government Code Section 4450 and in reference cited by CA Government Code Sections 4450 through 4461, 12955.1(c), and CA Health and Safety Code Sections 18949.1, 19952 through 19959.

401.0 General.

401.1 Applicability. This chapter shall govern the materials and installation of plumbing fixtures, including faucets and fixture fittings, and the minimum number of plumbing fixtures required based on occupancy.

» **401.2 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 1701.1.

→ **401.3 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 non-compliant plumbing fixtures, and duties and responsibilities for ensuring compliance.

[HCD-1] 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 1101.3, et seq. for the definition of a noncompliant plumbing fixture, types of buildings affected and other subsequent enactment dates.

[Note 3: [OSHPD 1, 2, 3 & 4] Also refer to Title 20, California Code of Regulations, Division 2, Chapter 4, Article 4, Section 1605.3 (i).

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, copper alloy, 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, lavatory, 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 copper alloy, 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 copper alloy, 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 $\frac{1}{4}$ 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 copper alloy, 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 Supply Fittings.** The supply lines and fittings for every plumbing fixture shall be so installed as to prevent backflow in accordance with Chapter 6.

» **402.8 Installation.** Fixtures shall be installed in accordance with the manufacturer's installation instructions.

» **402.9 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.

» **402.10 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.

» **402.11 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 and water supply piping. 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 Accessible Plumbing Facilities.

403.1 General. 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 Chapter 11A of the California Building Code.*

403.2 Fixtures and Fixture Fittings for Persons with Disabilities. Plumbing fixtures and fixture fittings for persons with disabilities shall comply with the applicable standards referenced in Chapter 4. *[HCD 1-AC] Specific requirements regarding accommodations for persons with disabilities are contained in Chapter 11A of the California Building Code.*

403.3 Exposed Pipes and Surfaces. Water supply and drain pipes under accessible lavatories and sinks shall be insulated or otherwise be configured to protect against contact. Protectors, insulators, or both shall comply with ASME A112.18.9.

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 Prohibited Fixtures.

405.1 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.

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

405.3 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.

406.0 Special Fixtures and Specialties.

406.1 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.

406.2 Special Use Sinks. Restaurant kitchen and other special use sinks shall be permitted to be made of approved-type

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 and the *California Building Code*. 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-AC] 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: [Not adopted for OSHPD 1, 2, 3 & 4]

- (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 Family or Assisted-Use Toilet Facilities. Where a separate toilet facility is required for each sex, and each toilet facility is required to have only one water closet, two family or assisted-use toilet facilities shall be permitted in place of the required separate toilet facilities.

422.2.2 [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 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 [DPH] 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 (100°F - 115°F) (37.8°C - 46.1°C) running water.

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

PLUMBING FIXTURES AND FIXTURE FITTINGS

TABLE 422.1
MINIMUM PLUMBING FACILITIES¹

Each building shall be provided with sanitary facilities, including provisions for persons with disabilities as prescribed by the Department Having Jurisdiction⁷. 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 Chapter 11A of the California Building Code. Permanent buildings in mobilehome parks and special occupancy parks required to be accessible by persons with disabilities, shall comply with Chapter 11B of the California Building Code.
- (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) ⁴	LAVATORIES (FIXTURES PER PERSON) ^{5, 6}		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: 301-600 4: 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-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: 301-600 4: 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.	

CALIFORNIA PLUMBING CODE – MATRIX ADOPTION TABLE
CHAPTER 5 - WATER HEATERS

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

Adopting Agency	BSC	BSC-CG	SFM	HCD			DSA			OSHPD				BSCC	DPH	AGR	DWR	CEC	CA	SL	SLC
				1	2	1-AC	AC	SS	SS/CC	1	2	3	4								
Adopt Entire Chapter	X									X	X	X	X								
Adopt Entire Chapter as amended (amended sections listed below)			X	X	X			X	X												
Adopt only those sections that are listed below																					
Chapter/Section																					
507.2			X	X	X			X	X												

This state agency does not adopt sections identified with the following symbol: †

The Office of the State Fire Marshal's adoption of this chapter or individual sections is applicable to structures regulated by other state agencies pursuant to Section 1.11.

CALIFORNIA PLUMBING CODE – MATRIX ADOPTION TABLE
CHAPTER 6 - WATER SUPPLY AND DISTRIBUTION

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

Adopting Agency	BSC	BSC-CG	SFM	HCD			DSA			OSHPD				BSCC	DPH	AGR	DWR	CEC	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						
Adopt only those sections that are listed below			X													X				X	
Chapter/Section																					
601.2 Exceptions				X	X													X			
601.3.2				X	X																
601.4																				X	
601.5																			X		
601.6																		X			
601.7																		X			
601.8																		X			
603.5.11				X	X																
603.5.14, Note			X																		
604.1 Exception											X	X	X	X							
Table 604.1 Notes	X			X	X			X	X								X	X			
604.1.1				X	X																
604.1.2				X	X																
604.13	X			X	X																
605.2.2				X	X																
605.9											X	X	X	X							
605.9.1											X	X	X	X							
605.10	X			X	X																
605.10.1	X																				
605.10.1.1	X																				
605.12.2				X	X																
605.15				X	X						X	X	X	X							
606.8											X	X	X	X							
607.1				X																	
609.9											X	X	X	X							
609.10				†	†																
Table 610.3				X	X																

CALIFORNIA PLUMBING CODE – MATRIX ADOPTION TABLE
CHAPTER 6 - WATER SUPPLY AND DISTRIBUTION (continued)

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

Adopting Agency	BSC	BSC-CG	SFM	HCD			DSA			OSHPD				BSCC	DPH	AGR	DWR	CEC	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						
Adopt only those sections that are listed below			X												X			X			
Chapter/Section			X																		
612.0			X																		
612.3.1 Exception 4																					
612.3.4																					
612.3.8																					
612.5.1.3																					
612.5.2																					
612.5.2.2																					
613.0 & Subsections											X	X	X	X							
614.0 & Subsections											X	X	X	X							
615.0 & Subsections											X	X	X	X							
615.1											X	X	X	X							
615.2											X	X	X	X							
615.3											X	X	X	X							
615.4											X										

This state agency does not adopt sections identified with the following symbol: †

The Office of the State Fire Marshal's adoption of this chapter or individual sections is applicable to structures regulated by other state agencies pursuant to Section 1.11.

CHAPTER 6

WATER SUPPLY AND DISTRIBUTION

601.0 General.

601.1 Applicability. This chapter shall govern the materials, design, and installation of water supply systems, including methods and devices used for backflow prevention.

» **601.2 Hot and Cold Water Required.** Except where not deemed necessary for safety or sanitation by the Authority Having Jurisdiction, each plumbing fixture shall be provided with an adequate supply of potable running water piped thereto in an approved manner, so arranged as to flush and keep it in a clean and sanitary condition without danger of backflow or cross-connection. Water closets and urinals shall be flushed by means of an approved flush tank or flushometer valve.

Exceptions:

- (1) Listed fixtures that do not require water for their operation and are not connected to the water supply.
- (2) *[HCD 1 & HCD 2] For limited-density owner-built rural dwellings, potable water shall be available to the dwelling site, although such water need not be pressurized. Where water is not piped from a well, spring, cistern or other source, there shall be a minimum reserve of 50 gallons (189 L) of potable water available. Where water delivery is pressurized, piping shall be installed in accordance with the provisions of this chapter.*
- (3) *[HCD 1 & HCD 2] Recycled water may be allowed as specified in Chapter 16A Part II, and on-site treated nonpotable gray water as specified in Chapter 15, Section 1504 of this code.*
- (4) *[DWR] Where a public agency requires a building to use recycled water to flush water closets and urinals in accordance with California Water Code 13554.*

In occupancies where plumbing fixtures are installed for private use, hot water shall be required for bathing, washing, laundry, cooking purposes, dishwashing or maintenance. In occupancies where plumbing fixtures are installed for public use, hot water shall be required for bathing and washing purposes. This requirement shall not supersede the requirements for individual temperature control limitations for public lavatories and public and private bidets, bathtubs, whirlpool bathtubs, and shower control valves.

» **601.3 Identification of a Potable and Nonpotable Water System.** In buildings where potable water and nonpotable water systems are installed, each system shall be clearly identified in accordance with Section 601.3.1 through Section 601.3.5.

» **601.3.1 Potable Water.** Green background with white lettering.

601.3.2 Color and Information. Each system shall be identified with a colored pipe or band and coded with paints, wraps, and materials compatible with the piping.

Except as required in Section 601.3.3, nonpotable water systems shall have a yellow background with black uppercase lettering, with the words “CAUTION: NONPOTABLE WATER, DO NOT DRINK.” Each nonpotable system shall be identified to designate the liquid being conveyed, and the direction of normal flow shall be clearly shown. The minimum size of the letters and length of the color field shall comply with Table 601.3.2. *[HCD 1 & HCD 2] An international symbol of a glass in a circle with a slash through it shall be provided similar to that shown in Figure 601 for all nonpotable water systems.*



FIGURE 601
INTERNATIONAL SYMBOL

The background color and required information shall be indicated every 20 feet (6096 mm) but not less than once per room, and shall be visible from the floor level.

TABLE 601.3.2
MINIMUM LENGTH OF COLOR FIELD AND SIZE OF LETTERS

OUTSIDE DIAMETER OF PIPE OR COVERING (inches)	MINIMUM LENGTH OF COLOR FIELD (inches)	MINIMUM SIZE OF LETTERS (inches)
½ to 1½	8	½
1½ to 2	8	¾
2½ to 6	12	1¼
8 to 10	24	2½
Over 10	32	3½

For SI units: 1 inch = 25.4 mm

601.3.3 Alternate Water Sources. Alternate water source systems shall have a purple (Pantone color No. 512, 522C, or equivalent) background with uppercase lettering and shall be field or factory marked as follows:

- (1) Gray water systems shall be marked in accordance with this section with the words “CAUTION: NONPOTABLE GRAY WATER, DO NOT DRINK” in black letters.

- (2) Reclaimed (recycled) water systems shall be marked in accordance with this section with the words: "CAUTION: NONPOTABLE RECLAIMED (RECYCLED) WATER, DO NOT DRINK" in black letters.
- (3) On-site treated water systems shall be marked in accordance with this section with the words: "CAUTION: ON-SITE TREATED NONPOTABLE WATER, DO NOT DRINK" in black letters.
- (4) Rainwater catchment systems shall be marked in accordance with this section with the words: "CAUTION: NONPOTABLE RAINWATER WATER, DO NOT DRINK" in black letters.

» 601.3.4 Fixtures. Where vacuum breakers or backflow preventers are installed with fixtures listed in Table 1701.1, identification of the discharge side shall be permitted to be omitted.

» 601.3.5 Outlets. Each outlet on the nonpotable water line that is used for special purposes shall be posted with black uppercase lettering as follows: "CAUTION: NONPOTABLE WATER, DO NOT DRINK."

601.4 [CA] Schools of Cosmetology and Cosmetological Establishments.

601.4.1 Hot-and Cold running Water. At least one sink with hot-and cold-running water shall be provided in each work area or workroom where hairdressing is performed in each school and establishment.

601.4.2 Handwashing Facilities. Each school and establishment shall provide adequate handwashing facilities, including hot-and cold-running water, located within or adjacent to the toilet room or rooms in accordance with Table 422.1.

601.4.3 Drinking Water. Each school and establishment shall supply potable drinking water convenient to students, patrons and employees. Approved sanitary drinking fountains shall be installed and so regulated that a jet of at least 2 inches (51 mm) shall be constantly available.

601.5 [AGR] Meat and Poultry Processing Plants. Except as provided in Section 601.5.4, the water supply shall be ample and potable, with adequate pressure and facilities for its distribution in the plant, and its protection against contamination and pollution.

Note: A water report, issued under the authority of the state health agency, certifying to the potability of the water supply, shall be obtained by the applicant and furnished to the administrator whenever such report is required by the administrator.

601.5.1 A supply of hot water shall be available.

601.5.2 Hose connections with steam and water-mixing valves or hot-water hose connections shall be provided at locations throughout the plant.

601.5.3 The refuse rooms shall be provided with facilities for washing refuse cans and other equipment in the rooms.

601.5.4 Non-potable water is permitted only in those parts of official plants where no product is handled or prepared, and then only for limited purposes, such as on condensers not connected with the potable water supply, in vapor lines serving inedible product rendering tanks, and in sewer lines for moving heavy solids in the sewage. In all cases, non-potable water lines shall be clearly identified and shall not be cross connected with the potable water supply.

Exception: Cross connection is permitted if this is necessary for fire protection and such connection is of a type with a break to ensure against accidental contamination, and to be approved by local authorities and by the Department.

601.5.5 Equipment using potable water shall be so installed as to prevent back-siphonage into the potable water system.

601.5.6 All pipelines, reservoirs, tanks, cooling towers and like equipment employed in handling reused water shall be constructed and installed so as to facilitate their cleaning and inspection.

601.5.7 Hot water of such temperature as to accomplish a thorough cleanup shall be delivered under pressure to outlets.

601.5.7.1 An ample supply of water at not less than 180°F (82°C) shall be available when used for sanitizing purposes.

601.5.8 Pens, alleys, and runways shall have hose connections for cleanup purposes.

601.6 [AGR] Collection Centers and Facilities.

601.6.1 The water supply shall be ample with facilities for its distribution. An ample supply of water at not less than 180°F (82°C), or other suitable method.

601.6.2 The vehicle cleaning and sanitizing area shall be provided with adequate line steam, producing a temperature of at least 180°F (82°C), or other suitable method.

601.6.3 Hose connections with steam and water-mixing valves of hot-and cold-water hose connections shall be provided at locations throughout the building and at unloading and vehicle cleaning slabs.

601.7 [AGR] Renderers. This area shall be provided with live steam or other method of sanitizing vehicles.

601.8 [AGR] Horse Meat and Pet Food Establishments.

601.8.1 The water supply shall be ample, clean and potable, with facilities for its distribution in the plant, and its protection against contamination and pollution.

601.8.1.1 Equipment using potable water shall be so installed as to prevent back-siphonage into the potable water system.

601.8.1.2 Non-potable water is permitted only in those parts of official plants where no edible product is handled or prepared, and then only for limited

CALIFORNIA PLUMBING CODE – MATRIX ADOPTION TABLE
CHAPTER 7 - SANITARY DRAINAGE

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

Adopting Agency	BSC	BSC-CG	SFM	HCD			DSA			OSHPD				BSCC	DPH	AGR	DWR	CEC	CA	SL	SLC
				1	2	1-AC	AC	SS	SS/CC	1	2	3	4								
Adopt Entire Chapter	X																				
Adopt Entire Chapter as amended (amended sections listed below)				X	X			X	X	X	X	X	X			X					
Adopt only those sections that are listed below																					
Chapter/Section																					
701.2(2)							X	X													
701.2(2) (a)				X	X																
701.2(2) (b)										X	X	X	X								
Table 702.1				X	X																
705.1.2				X	X																
705.5.2				X	X																
705.8.4				X	X																
710.3				X	X																
710.3.1				X	X																
713.4				X																	
717.2																	X				
724.0 - 724.2																		X			
725.0																		X			
726.0 - 726.2																		X			
727.0 - 727.1(a) (b)										X											

This state agency does not adopt sections identified with the following symbol: †

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CALIFORNIA PLUMBING CODE – MATRIX ADOPTION TABLE
CHAPTER 9 - VENTS

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

Adopting Agency	BSC	BSC-CG	SFM	HCD			DSA			OSHPD				BSCC	DPH	AGR	DWR	CEC	CA	SL	SLC
				1	2	1-AC	AC	SS	SS/CC	1	2	3	4								
Adopt Entire Chapter	X																				
Adopt Entire Chapter as amended (amended sections listed below)				X	X			X	X	X	X	X	X								
Adopt only those sections that are listed below																					
Chapter/Section																					
903.1(2)				X				X	X												
903.1.1				X	X																
903.1.2				X																	
903.1.3										X	X	X	X								
906.2.1										X	X	X	X								

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CALIFORNIA PLUMBING CODE – MATRIX ADOPTION TABLE
CHAPTER 10 – TRAPS AND INTERCEPTORS

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

Adopting Agency	BSC	BSC-CG	SFM	HCD			DSA			OSHPD				BSCC	DPH	AGR	DWR	CEC	CA	SL	SLC
				1	2	1-AC	AC	SS	SS/CC	1	2	3	4								
Adopt Entire Chapter	X							X	X												
Adopt Entire Chapter as amended (amended sections listed below)				X	X					X	X	X	X			X					
Adopt only those sections that are listed below																					
Chapter/Section																					
<i>1003.1 Exception 2</i>				X	X																
<i>1010.2 & Subsections</i>																X					
<i>1010.3</i>																	X				
<i>1010.4</i>																	X				
<i>1010.5 & Subsections</i>																	X				
<i>1014.1A</i>										X	X	X	X								
<i>1014.1B</i>										X	X	X	X								
<i>1014.1C</i>										X	X	X	X								
<i>1015.5</i>										X	X	X	X								
<i>1015.6</i>										X	X	X	X								

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CALIFORNIA PLUMBING CODE – MATRIX ADOPTION TABLE
CHAPTER 11 - STORM DRAINAGE

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

Adopting Agency	BSC	BSC-CG	SFM	HCD			DSA			OSHPD				BSCC	DPH	AGR	DWR	CEC	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								
Adopt only those sections that are listed below																					
Chapter/Section																					
1101.4	X			X				X	X	X	X	X	X								
1101.4.2.1				X																	
1101.4.2.2										X	X	X	X								
1101.6 Exception				X	X																

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CALIFORNIA PLUMBING CODE – MATRIX ADOPTION TABLE
CHAPTER 12 - FUEL GAS PIPING

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

Adopting Agency	BSC	BSC-CG	SFM	HCD			DSA			OSHPD				BSCC	DPH	AGR	DWR	CEC	CA	SL	SLC
				1	2	1-AC	AC	SS	SS/CC	1	2	3	4								
Adopt Entire Chapter	X			X	X					X	X	X	X								
Adopt Entire Chapter as amended (amended sections listed below)			X					X	X												
Adopt only those sections that are listed below																					
Chapter/Section																					
1211.6			X					X	X												
1211.7								X	X												

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CALIFORNIA PLUMBING CODE – MATRIX ADOPTION TABLE
CHAPTER 15 - ALTERNATE WATER SOURCES FOR NONPOTABLE APPLICATIONS

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

Adopting Agency	BSC	BSC-CG	SFM	HCD			DSA			OSHPD				BSCC	DPH	AGR	DWR	CEC	CA	SL	SLC
				1	2	1-AC	AC	SS	SS/C	1	2	3	4								
Adopt Entire Chapter										X	X	X	X								
Adopt Entire Chapter as amended (amended sections listed below)	X			X	X																
Adopt only those sections that are listed below																					
Chapter/Section																					
Intent	X			X	X																
1501.1	X				X																
1501.1.1						X															
1501.2	X					X															
1501.3 & Exception	X					X															
1501.5	X					X															
1501.5.1	X																				
1501.6	X					X															
1501.7	X					X															
1501.10							X	X	X												
1501.10.1							X	X	X												
1501.11.2							X														
1501.11.2.4	†					†	†														
1502.0		X																			
1502.1 - 1502.1.3	X					X															
1502.2 - 1502.2.3	X					X															
1502.3	X					X															
1502.4 Exception	X					X															
Table 1502.4	X					X															
1502.5 Exception	X					X															
1502.6	X					X															
1502.7 Exceptions 2 & 3	X					X															
1502.8 Exception	X					X															
1502.8.1						X															
1502.8.3						X															
1502.9	X					X															
1502.9.1						X															
1502.9.2.1						X															
1502.9.2.2						X															
1502.10.2 Exceptions 1 & 2	X					X															
1502.10.3 Note						X															

CALIFORNIA PLUMBING CODE – MATRIX ADOPTION TABLE
CHAPTER 15 - ALTERNATE WATER SOURCES FOR NONPOTABLE APPLICATIONS (continued)

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

Adopting Agency	BSC	BSC-CG	SFM	HCD			DSA			OSHPD				BSCC	DPH	AGR	DWR	CEC	CA	SL	SLC
				1	2	1-AC	AC	SS	SS/C	1	2	3	4								
Adopt Entire Chapter										X	X	X	X								
Adopt Entire Chapter as amended (amended sections listed below)	X			X	X																
Adopt only those sections that are listed below																					
Chapter/Section																					
Table 1502.10	X			X																	
1502.11 - 1502.11.3	X	X		X																	
<i>Table 1502.11</i>	X			X																	
Table 1502.11.3	X			X																	
1502.12	X			X																	
1502.13				X																	
<i>1502.13.1</i>	X			X																	
1502.15				X																	
1503.0 - 1503.13	†			†						†	†	†	†								
1504.0				X																	
1504.1	X			X																	
1504.2	X			X																	
1504.3	X			X																	
1504.4	X			X																	
1504.5	X																				
1504.6	X			X																	
1504.7	X			X																	
1504.8	X			X																	
1504.10 - 1504.10.6	X			X																	
1504.11	X			X	X																
1504.12	X																				

This state agency does not adopt sections identified with the following symbol: †

The Office of the State Fire Marshal's adoption of this chapter or individual sections is applicable to structures regulated by other state agencies pursuant to Section 1.11.

CHAPTER 15

ALTERNATE WATER SOURCES FOR NONPOTABLE APPLICATIONS

Intent

The provisions of this chapter are intended to:

1. *Conserve water by facilitating greater reuse of laundry, shower, lavatory and similar sources of discharge for irrigation and/or indoor use.*
2. *Reduce the number of non-compliant gray water systems by making legal compliance easily achievable.*
3. *Provide guidance for avoiding potentially unhealthful conditions.*
4. *Provide an alternative way to relieve stress on a private sewage disposal system by diverting the gray-water.*

» **1501.0 General**

» **1501.1 Applicability.** *[HCD 1] Except as otherwise provided for in this chapter, the provisions of this code shall be applicable to alternate water source system installation. [BSC & HCD 1] The provisions of this chapter shall apply to the construction, alteration, discharge, use and repair of alternate water source systems for nonpotable applications.*

» **1501.1.1 Allowable Use of Alternate Water.** Where approved or required by the Authority Having Jurisdiction, alternate water sources [reclaimed (recycled) water, gray water, and on-site treated nonpotable gray water] shall be permitted to be used in lieu of potable water for the applications identified in this chapter.

» **1501.2 System Design.** *Alternate water source systems shall be designed in accordance with this chapter by a registered design professional or who demonstrates competency to design the alternate water source system as required by the Authority Having Jurisdiction. Components, piping, and fittings used in any alternate water source system shall be listed.*

» **1501.3 Permit.** It shall be unlawful for a person to construct, install, alter, or cause to be constructed, installed, or altered an alternate water source system in a building or on a premise without first obtaining a permit to do such work. *Prior to commencing the issuance of permits for indoor gray water systems pursuant to state requirements relating to gray water, a city, county, city and county or other local agency shall seek consultation with the local public health department to ensure that local public health concerns are addressed in local standards or ordinances, or in issuing permits. See California Water Code Section 14877.3.*

Exception: *[HCD 1] A construction permit shall not be required for a clothes washer system meeting the requirements of Section 1502.1.1.*

1501.4 Component Identification. System components shall be properly identified as to the manufacturer.

1501.5 Maintenance and Inspection. Alternate water source systems and components shall be inspected and maintained in accordance with *the manufacturer's recommendations and/or as required by the Enforcing Agency. [BSC]* Where no manufacturers recommendations exist, additional recommendations are listed in Table 1501.5.

1501.5.1 Maintenance Responsibility. The required maintenance and inspection of alternate water source systems shall be the responsibility of the property owner, unless otherwise required by the Authority Having Jurisdiction.

1501.6 Operation and Maintenance Manual. An operation and maintenance manual for gray water and on-site treated water systems required to have a permit in accordance with Section 1501.3 shall be supplied to the building owner by the system designer or installer. The operating and maintenance manual shall include the following:

- (1) *Diagram(s) of the entire system and the location of system components.*
- (2) *Instructions on operating and maintaining the system.*
- (3) *Instructions on maintaining the required water quality for on-site treated nonpotable water systems.*
- (4) *Details on startup, shutdown, and deactivating the system for maintenance, repair, or other purposes.*
- (5) *Applicable testing, inspection, and maintenance frequencies in accordance with Section 1501.5.*
- (6) *A method of contacting the installer and/or manufacturer(s).*
- (7) *Directions to the owner or occupant that the manual shall remain with the building throughout the life cycle of the structure.*

1501.7 Minimum Water Quality Requirements. The minimum water quality for alternate water source systems shall meet the applicable water quality requirements for the intended application as determined by the Authority Having Jurisdiction. In the absence of water quality requirements for on-site nonpotable treated gray water systems, the requirements of NSF 350 shall apply.

Exception: Water treatment is not required for gray water used in a disposal field or for subsurface or subsoil irrigation.

1501.8 Material Compatibility. Alternate water source systems shall be constructed of materials that are compatible with the type of pipe and fitting materials, water treatment, and water conditions in the system.

TABLE 1501.5 [BSC]

RECOMMENDED MINIMUM ALTERNATE WATER SOURCE TESTING, INSPECTION, AND MAINTENANCE FREQUENCY

DESCRIPTION	MINIMUM FREQUENCY
Inspect and clean filters and screens, and replace (where necessary).	<i>In accordance with manufacturer's instructions, and/or the Authority Having Jurisdiction, or every 3 months.</i>
Inspect and verify that disinfection, filters and water quality treatment devices and systems are operational and maintaining minimum water quality requirements as determined by the Authority Having Jurisdiction.	In accordance with manufacturer's instructions, and the Authority Having Jurisdiction.
Inspect pumps and verify operation.	<i>In accordance with manufacturer's instructions, and/or the Authority Having Jurisdiction, or after installation and every 12 months thereafter.</i>
Inspect valves and verify operation.	<i>In accordance with manufacturer's instructions, and/or Authority Having Jurisdiction, or after installation and every 12 months thereafter.</i>
Inspect pressure tanks and verify operation.	<i>In accordance with manufacturer's instructions, and/or the Authority Having Jurisdiction, or after installation and every 12 months thereafter.</i>
Clear debris from and inspect storage tanks, locking devices, and verify operation.	<i>In accordance with manufacturer's instructions, and/or the Authority Having Jurisdiction, or after installation and every 12 months thereafter.</i>
Inspect caution labels and marking.	<i>In accordance with manufacturer's instructions, and/or the Authority Having Jurisdiction, or after installation and every 12 months thereafter.</i>
Inspect and maintain mulch basins for gray water irrigation systems.	As needed to maintain mulch depth and prevent ponding and runoff.
Cross-connection inspection and test*	<i>In accordance with this chapter, and/or the Authority Having Jurisdiction, or after installation and every 12 months thereafter.</i>

* The cross-connection test shall be performed in the presence of the Authority Having Jurisdiction in accordance with the requirements of this chapter, unless site conditions do not require it. Alternate testing requirements shall be permitted by the Authority Having Jurisdiction.

» **1501.9 System Controls.** Controls for pumps, valves, and other devices that contain mercury that come in contact with alternate water source water supply shall not be permitted.

1501.10 Commercial, Industrial, Institutional, and Residential Restroom Signs. A sign shall be installed in restrooms in commercial, industrial, institutional occupancies, and shall also be installed in residential common use area restrooms using reclaimed (recycled) water and on-site treated nonpotable gray water for water closets, urinals, or both. Each sign shall contain the following text:

TO CONSERVE WATER, THIS BUILDING USES
* * ON-SITE TREATED NONPOTABLE
GRAY WATER TO FLUSH TOILETS AND URINALS

1501.10.1 Equipment Room Signs. Each room containing reclaimed (recycled) water and on-site treated gray water equipment shall have a sign posted in a location that is visible to anyone working on or near nonpotable gray water equipment with the following wording in 1 inch (25.4 mm) letters:

CAUTION: NONPOTABLE * *, DO NOT DRINK. DO NOT CONNECT TO DRINKING WATER SYSTEM. NOTICE: CONTACT BUILDING MANAGEMENT BEFORE PERFORMING ANY WORK ON THIS WATER SYSTEM.

* Shall indicate RECLAIMED (RECYCLED) WATER or ON-SITE TREATED GRAY-WATER, accordingly.

1501.11 Inspection and Testing. Alternate water source systems shall be inspected and tested in accordance with Section 1501.11.1 and Section 1501.11.2 and/or as required by the Authority Having Jurisdiction.

1501.11.1 Supply System Inspection and Test. Alternate water source systems shall be inspected and tested in accordance with this code for testing of potable water piping.

1501.11.2 Cross-Connection Inspection and Testing. An initial inspection and test shall be performed on both the potable and alternate water source systems. The potable and alternate water source system shall be isolated from each other and independently inspected and tested to ensure there is no cross-connection in accordance with Section 1501.11.2.1 through Section 1501.11.2.4.

1501.11.2.1 Visual System Inspection. Prior to commencing the cross-connection testing, a dual system inspection shall be conducted by the Authority Having Jurisdiction and other authorities having jurisdiction as follows:

- (1) Meter locations of the alternate water source and potable water lines shall be checked to verify that no modifications were made, and that no cross-connections are visible.
- (2) Pumps and equipment, equipment room signs, and exposed piping in equipment room shall be checked.

groundwater depth to the satisfaction of the Authority Having Jurisdiction.

Note: The absence of groundwater in a test hole three (3) vertical feet (915 mm) below the deepest irrigation or disposal point shall be sufficient to satisfy this section unless seasonal high groundwater levels have been documented to rise to within this area.

→ **1502.11 Irrigation, Disposal Field and Mulch Basin Construction.** Irrigation fields, disposal fields and mulch basins used in gray water systems shall comply with this section. Gray water systems may contain either an irrigation field or a disposal field or a combination of both. This section is not intended to prevent the use of other methods of gray water irrigation or disposal approved by the Enforcing Agency.

||| **[BSC-CGJ** Irrigation design shall be verified in accordance with the California Green Building Standards Code (CALGreen), Chapter 5, Division 5.3.



TABLE 1502.11
SUBSURFACE IRRIGATION DESIGN
CRITERIA FOR SIX TYPICAL SOILS

TYPE OF SOIL	MAXIMUM EMMITTER DISCHARGE (gallons per day)	MINIMUM NUMBER OF EMMITTERS PER GALLON OF ESTIMATED GRAY WATER DISCHARGE PER DAY* (gallons per day)
Sand	1.8	0.6
Sandy loam	1.4	0.7
Loam	1.2	0.9
Clay loam	0.9	1.1
Silty clay	0.6	1.6
Clay	0.5	2.0

For SI units: 1 gallon per day = 0.000043 L/s

* The estimated gray water discharge per day shall be determined in accordance with Section 1502.8 of this code.

1502.11.1 Mulch Basin. A mulch basin may be used as an irrigation or disposal field. Mulch basins shall be sized in accordance with Table 1502.10 and of sufficient depth, length and width to prevent ponding or runoff during the gray water surge of a clothes washer, bathtub or shower. Mulch must be replenished as required due to decomposition of organic matter. Mulch basins will require periodic maintenance, reshaping or removal of dirt to maintain surge capacity and to accommodate plant growth and prevent ponding or runoff.

1502.11.2 Irrigation Field. The provisions of this section are not intended to prevent the use of any appropriate material, appliance, installation, device, design or method of construction. If an alternate design is not available, the following provisions may be used as guidance in the design of a gray water irrigation field:

(1) Filters used in gray water irrigation systems shall be as specified by the manufacturer's installation instructions for the design flow rate and intended use. The filter backwash and flush discharge shall

be contained and disposed of into the building sewer system, septic tank or, with approval of the Enforcing Agency, a separate mini-leachfield sized to accept all the backwash and flush discharge water. Filter backwash water and flush water shall not be used for any purpose. Sanitary procedures shall be followed when handling filter backwash and flush discharge or gray water.

- (2) Emitters shall be designed to resist root intrusion and shall be of a design recommended by the manufacturer for the intended gray water flow and use. For emitter ratings, refer to *Irrigation Equipment Performance Report, Drip Emitters and Micro-Sprinklers*, Center for Irrigation Technology, California State University, 5730 N. Chestnut Avenue, Fresno, California 93740-0018.
 - (3) Each irrigation zone shall be designed to include no less than the number of emitters specified in Table 1502.11, or through a procedure designated by the Enforcing Agency. Minimum spacing between emitters in any direction shall be sufficient to prevent surfacing or runoff.
 - (4) The system design shall provide user controls, such as valves, switches, timers and other controllers, as appropriate, to rotate the distribution of gray water between irrigation zones.
 - (5) All drip irrigation supply lines shall be polyethylene tubing or PVC Class 200 pipe or better and Schedule 40 fittings. All joints shall be pressure tested at 40 psi (276 kPa), and shown to be drip tight for five minutes, before burial. All supply piping shall be covered to a minimum depth of two (2) inches (51 mm) of mulch or soil. Drip feeder lines can be poly or flexible PVC tubing and shall be covered to a minimum depth of two (2) inches (51 mm) of mulch or soil.
 - (6) Where pressure at the discharge side of the pump exceeds 20 psi (138 kPa), a pressure-reducing valve able to maintain downstream pressure no greater than the maximum operating pressure of the installed tubing, emitters, or other components shall be installed downstream from the pump and before any emission device.
 - (7) When an irrigation system utilizes a pump, and discharges water at a point higher than the pump, a backwater valve shall be installed downstream of the pump to prevent back siphonage of water and soil.
- 1502.11.3 Disposal Field.** The provisions of this section are not intended to prevent the use of any appropriate material, appliance, installation, device, design or method of construction. If an alternate design is not available the following provisions may be used as guidance in the design of a gray water disposal field:

(A) Disposal systems shall be not less than three (3) inches (80 mm) in cross sectional dimension and shall be constructed of perforated high-density polyethylene pipe, perforated ABS pipe, perforated PVC pipe, leaching chambers or other approved materials, provided that sufficient openings are available for distribution of the gray water into the trench area. Material, construction, and perforation shall be in compliance with the appropriate absorption fields drainage standards and shall be approved by the Enforcing Agency.

(B) Filter material, clean stone, gravel, slag, or similar filter material acceptable to the Enforcing Agency, varying in size from three-quarter ($\frac{3}{4}$) inch (19.1 mm) to two and one-half (2 $\frac{1}{2}$) inches (64 mm) shall be placed in the trench to the depth and grade required by this section. The perforated section shall be laid on the filter material in an approved manner. The perforated section shall then be covered with filter material to the minimum depth required by this section. The filter material shall then be covered with untreated building paper, straw, or similar porous material to prevent closure of voids with earth backfill. No earth backfill shall be placed over the filter material cover until after inspection and acceptance.

Exception: Manufactured leaching chambers shall be installed in compliance with the manufacturer's installation instructions.

(C) Disposal fields shall be constructed in accordance with Table 1502.11.3.

(D) When necessary on sloping ground to prevent excessive line slopes, disposal lines shall be stepped or installed on the contour lines of the slope. The lines between each horizontal leaching section shall be made with approved water-tight joints and installed on natural or unfilled ground.

» TABLE 1502.11.3
SUBSOIL IRRIGATION FIELD CONSTRUCTION

DESCRIPTION	MINIMUM	MAXIMUM
Number of drain lines per valved zone ¹	1	-
Length of each perforated line ¹	-	100 feet
Bottom width of trench ¹	12 inches	24 inches
Spacing of lines, center to center ¹	4 feet	-
Depth of earth cover of lines	10 inches	-
Depth of filter material cover of lines	2 inches	-
Depth of filter material beneath lines ¹	3 inches	-
Grade of perforated lines level	level	3 inches per 100 feet

For SI units: 1 inch = 25.4 mm, 1 foot = 304.8 mm, 1 inch per foot = 83.3 mm/m

¹ Manufactured leaching chambers shall be installed in compliance with the manufacturer's installation instructions.

1502.12 Gray Water System Color and Marking Information.

Pressurized gray water distribution systems shall be identified as containing nonpotable water in accordance with Section 601.3 of this code. Marking shall be at intervals not to exceed 5 feet (1524 mm). Gray water distribution piping upstream of any connection to an irrigation or disposal field or a distribution valve shall be identified with the words "CAUTION: NONPOTABLE GRAY WATER, DO NOT DRINK".

1502.13 Other Collection and Distribution Systems.

Other collection and distribution systems shall be approved as allowed by Section 301.3 of this code.

1502.13.1 Future Connections. Gray water stub-out plumbing may be allowed for future connection prior to the installation of irrigation lines and landscaping. Stub-out shall be permanently marked "CAUTION: NONPOTABLE GRAY WATER, DO NOT DRINK."

1502.14 Testing. Building drains and vents for gray water systems shall be tested in accordance with this code. Surge tanks shall be filled with water to the overflow line prior to and during inspection. Seams and joints shall be left exposed, and the tank shall remain watertight. A flow test shall be performed through the system to the point of gray water discharge. Lines and components shall be watertight up to the point of the irrigation perforated and drip lines.

1502.15 Maintenance. Gray water systems and components shall be maintained in accordance with Section 1501.5.

1503.0 Reclaimed (Recycled) Water Systems.

1503.1 General. The provisions of this section shall apply to the installation, construction, alteration, and repair of reclaimed (recycled) water systems intended to supply uses such as water closets, urinals, trap primers for floor drains and floor sinks, aboveground and subsurface irrigation, industrial or commercial cooling or air conditioning and other uses approved by the Authority Having Jurisdiction.

1503.2 Permit. It shall be unlawful for a person to construct, install, alter, or cause to be constructed, installed, or altered a reclaimed (recycled) water system within a building or on a premises without first obtaining a permit to do such work from the Authority Having Jurisdiction.

1503.2.1 Plumbing Plan Submission. No permit for a reclaimed (recycled) water system shall be issued until complete plumbing plans, with data satisfactory to the Authority Having Jurisdiction, have been submitted and approved.

1503.3 System Changes. No changes or connections shall be made to either the reclaimed (recycled) water system or the potable water system within a site containing a reclaimed (recycled) water system without approval by the Authority Having Jurisdiction.

1503.4 Connections to Potable or Reclaimed (Recycled) Water Systems. Reclaimed (recycled) water systems shall have no connection to a potable water supply or alternate

CALIFORNIA PLUMBING CODE – MATRIX ADOPTION TABLE
CHAPTER 16 – NONPOTABLE RAINWATER CATCHMENT SYSTEMS

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

Adopting Agency	BSC	BSC-CG	SFM	HCD			DSA			OSHPD				BSCC	DPH	AGR	DWR	CEC	CA	SL	SLC
				1	2	1-AC	AC	SS	SS/C	1	2	3	4								
Adopt Entire Chapter																					
Adopt Entire Chapter as amended (amended sections listed below)	X			X	X																
Adopt only those sections that are listed below																					
Chapter/Section																					
1601.1	X			X																	
1601.2	X			X																	
1601.3 & Exceptions 1 & 2	X			X	X																
1601.4				X	X																
1601.5	X			X																	
1601.6	X			X																	
1602.4	X			X																	
1602.9.3	X																				
1602.9.3.1	X			X																	
1602.9.4	X																				
1602.9.4.1	X			X																	
Table 1602.9.4				X																	
1602.9.5.3	X			X																	
1602.9.5.4	X			X																	
1602.9.5.5	X			X																	
1602.9.5.6 A, B	X			X																	
1602.9.5.8	X			X																	
1602.10 - 1602.10.2	X			X																	
1602.11.2				X																	
1602.11.2.3				X																	

This state agency does not adopt sections identified with the following symbol: †

The Office of the State Fire Marshal's adoption of this chapter or individual sections is applicable to structures regulated by other state agencies pursuant to Section 1.11.

TABLE 1602.9.4
MINIMUM TREATMENT AND WATER QUALITY FOR RAINWATER

APPLICATION	MINIMUM TREATMENT	MINIMUM WATER QUALITY
<i>Car washing</i>	<i>Debris excluder or other approved means in compliance with Section 1602.9.10</i>	<i>N/A</i>
	<i>100 Micron (100 µm) in compliance with Section 1602.9.11 for drip irrigation</i>	
<i>Surface, subsurface and drip irrigation</i>	<i>Debris excluder or other approved means in compliance with Section 1602.9.10</i>	<i>N/A</i>
	<i>100 Micron (100 µm) in compliance with Section 1602.9.11 for drip irrigation</i>	
<i>Spray irrigation where the maximum storage volume is less than 360 gallons (1363 L)</i>	<i>Debris excluder or other approved means in compliance with Section 1602.9.10 and disinfection in accordance with Section 1602.9.8</i>	<i>N/A</i>
<i>Spray irrigation where the maximum storage volume is equal to or greater than 360 gallons (1363 L)</i>	<i>Debris excluder or other approved means in compliance with Section 1602.9.10</i>	<i>Escherichia coli: < 100 CFU/100 ml Turbidity: < 10 NTU</i>
<i>Urinal and water closet flushing, clothes washing, and trap priming</i>	<i>Debris excluder or other approved means in compliance with Section 1602.9.10</i>	<i>Escherichia coli: < 100 CFU/100 ml</i>
	<i>100 Micron (100 µm) in compliance with Section 1602.9.11</i>	<i>Turbidity: < 10 NTU</i>
<i>Ornamental fountains and other water features</i>	<i>Debris excluder or other approved means in compliance with Section 1602.9.10</i>	<i>Escherichia coli: < 100 CFU/100 ml Turbidity: < 10 NTU</i>
<i>Cooling tower make up water</i>	<i>Debris excluder or other approved means in compliance with Section 1602.9.10</i>	<i>Escherichia coli: < 100 CFU/100 ml</i>
	<i>100 Micron (100 µm) in compliance with Section 1602.9.11</i>	<i>Turbidity: < 10 NTU</i>

- » **1602.9.5.1 Construction.** Rainwater storage shall be constructed of solid, durable materials not subject to excessive corrosion or decay and shall be watertight. Storage tanks shall be approved by the Authority Having Jurisdiction, provided such tanks are in accordance with approved applicable standards.
- » **1602.9.5.2 Location.** Rainwater storage tanks shall be permitted to be installed above or below grade.
- » **1602.9.5.3 Above Grade.** Above grade storage tanks shall be of an opaque material, approved for aboveground use in direct sunlight or shall be shielded from direct sunlight. Tanks shall be installed in an accessible location to allow for inspection and cleaning. The tank shall be installed on a foundation or platform that is constructed to accommodate loads in accordance with the *California Building Code*.
- » **1602.9.5.4 Below Grade.** Rainwater storage tanks installed below grade shall be structurally designed to withstand anticipated earth or other loads. Holding tank covers shall be capable of supporting an earth load of not less than 300 pounds per square foot (lb/ft^2) ($1465 \text{ kg}/\text{m}^2$) where the tank is designed for underground installation. Below grade rainwater tanks installed underground shall be provided with manholes. *Below grade storage tanks,*

located outside of the building, shall be provided with either a manhole not less than 24 inches (610 mm) square or a manhole with an inside diameter of not less than 24 inches (610 mm). Service ports in manhole covers shall be not less than 8 inches (203 mm) in diameter. The manhole opening shall be located not less than 4 inches (102 mm) above the surrounding grade. The surrounding grade shall be sloped away from the manhole. Underground tanks shall be ballasted, anchored, or otherwise secured, to prevent the tank from floating out of the ground where empty. The combined weight of the tank and hold down system shall meet or exceed the buoyancy force of the tank.

1602.9.5.5 Drainage and Overflow. Rainwater storage tanks shall be provided with a means of draining and cleaning. The overflow drain shall not be equipped with a shutoff valve. The overflow outlet shall discharge in accordance with this code for storm drainage systems. Where discharging to the storm drainage system, the overflow drain and tank drain shall be protected from backflow of the storm drainage system by a backwater valve or other approved method. *Backwater valves shall be installed so that access is provided to the working parts for service and repair.*

1602.9.5.5.1 Overflow Outlet Size. The overflow outlet shall be sized to accommodate

the flow of the rainwater entering the tank and not less than the aggregate cross-sectional area of inflow pipes.

1602.9.5.6 Opening and Access Protection.

Rainwater tank openings shall be protected to prevent the entrance of insects, birds, or rodents into the tank *and piping systems*.

(A) Animals and Insects. Screens installed on vent pipes, inlets, and overflow pipes shall have an aperture of not greater than $\frac{1}{16}$ of an inch (1.6 mm) and shall be close fitting.

(B) Human Access. A minimum of one access opening shall be provided to allow inspection and cleaning. Rainwater tank manholes and access openings shall be secured by either a lockable device or other approved method to prevent unauthorized access.

1602.9.5.7 Marking. Rainwater tanks shall be permanently marked with the capacity and the language: "NONPOTABLE RAINWATER." Where openings are provided to allow a person to enter the tank, the opening shall be marked with the following language: "DANGER-CONFINED SPACE."

1602.9.5.8 Storage Tank Venting. Where venting by means of drainage or overflow piping is not provided, or is considered insufficient, a vent shall be installed on each tank. The vent shall extend from the top of the tank and terminate not less than 6 inches (152 mm) above grade and *shall be provided with a vent sized in accordance with this code, and based on the size of the influent pipe*. The vent terminal shall be directed downward and covered with a $\frac{1}{16}$ of an inch (1.6 mm) mesh screen to prevent the entry of vermin and insects. *Tank vent pipes shall not be connected to the sanitary drainage system vent.*

1602.9.6 Pumps. Pumps serving rainwater catchment systems shall be listed. Pumps supplying water to water closets, urinals, and trap primers shall be capable of delivering not less than 15 pounds-force per square inch (psi) (103 kPa) residual pressure at the highest and most remote outlet served. Where the water pressure in the rainwater supply system within the building exceeds 80 psi (552 kPa), a pressure reducing valve reducing the pressure to 80 psi (552 kPa) or less to water outlets in the building shall be installed in accordance with this code.

1602.9.7 Roof Drains. Primary and secondary roof drains, conductors, leaders, and gutters shall be designed and installed in accordance with this code.

1602.9.8 Water Quality Devices and Equipment. Devices and equipment used to treat rainwater to maintain the minimum water quality requirements determined by the Authority Having Jurisdiction shall be listed or labeled (third-party certified) by a listing agency (accredited conformity assessment body) and approved for the intended application.

1602.9.9 Freeze Protection. Tanks and piping installed in locations subject to freezing shall be provided with an approved means of freeze protection.

1602.9.10 Debris Removal. The rainwater catchment conveyance system shall be equipped with a debris excluder or other approved means to prevent the accumulation of leaves, needles, other debris and sediment from entering the storage tank. Devices or methods used to remove debris or sediment shall be accessible and sized and installed in accordance with manufacturer's installation instructions.

1602.9.11 Required Filters. A filter permitting the passage of particulates not larger than 100 microns (100 μm) shall be provided for rainwater supplied to water closets, urinals, trap primers, and drip irrigation system.

1602.9.12 Roof Gutters. Gutters shall maintain a minimum slope and be sized in accordance with Section 1103.3.

1602.10 Signs. Signs in buildings using rainwater shall be in accordance with Section 1602.10.1 and Section 1602.10.2, *and applicable requirements of the California Building Code*.

1602.10.1 Commercial, Industrial, Institutional and Residential Restroom Signs. A sign shall be installed in restrooms in commercial, industrial, and institutional occupancies, *and shall also be installed in residential common use area restrooms* using nonpotable rainwater for water closets, urinals, or both. Each sign shall contain the following text:

TO CONSERVE WATER, THIS BUILDING USES RAINWATER TO FLUSH TOILETS AND URINALS.

1602.10.2 Equipment Room Signs. Each equipment room containing nonpotable rainwater equipment shall have a sign posted with the following wording in 1 inch (25.4 mm) letters:

CAUTION NONPOTABLE WATER, DO NOT DRINK. DO NOT CONNECT TO DRINKING WATER SYSTEM. NOTICE: CONTACT BUILDING MANAGEMENT BEFORE PERFORMING ANY WORK ON THIS WATER SYSTEM.

This sign shall be posted in a location that is visible to anyone working on or near rainwater water equipment.

1602.11 Inspection and Testing. Rainwater catchment systems shall be inspected and tested in accordance with Section 1602.11.1 and Section 1602.11.2.

1602.11.1 Supply System Inspection and Test. Rainwater catchment systems shall be inspected and tested in accordance with the applicable provisions of this code for testing of potable water and storm drainage systems. Storage tanks shall be filled with water to the overflow opening for a period of 24 hours, and during inspection, or by other means as approved by the Authority Having Jurisdiction. Seams and joints shall be exposed during inspection and checked for watertightness.

CALIFORNIA PLUMBING CODE – MATRIX ADOPTION TABLE
CHAPTER 16A - NON-POTABLE WATER REUSE SYSTEMS

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

Adopting Agency	BSC	BSC-CG	SFM	HCD			DSA			OSHPD				BSCC	DPH	AGR	DWR	CEC	CA	SL	SLC
				1	2	1-AC	AC	SS	SS/C	1	2	3	4								
Adopt Entire Chapter																					
Adopt Entire Chapter as amended (amended sections listed below)																					
Adopt only those sections that are listed below																		X			
Chapter/Section																			X		
Part II																					

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CALIFORNIA PLUMBING CODE – MATRIX ADOPTION TABLE
APPENDIX I - INSTALLATION STANDARD FOR PEX TUBING SYSTEMS
FOR HOT- AND COLD-WATER DISTRIBUTION

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

Adopting Agency	BSC	BSC-CG	SFM	HCD			DSA			OSHPD				BSCC	DPH	AGR	DWR	CA	CEC	SL	SLC
	1	2	1-AC	AC	SS	SS/C	1	2	3	4											
Adopt Entire Chapter	X			X	X					X	X	X	X								
Adopt Entire Chapter as amended (amended sections listed below)																					
Adopt only those sections that are listed below																					
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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, 2013 Triennial Edition, effective January 1, 2014.

1. *(BSC 03/15, HCD 06/15, DSA-SS 05/15, OSHPD 05/15, SFM 04/15) Adoption by reference of the 2015 Uniform Plumbing Code (UPC) with necessary state amendments and repeal of the 2012 edition of the UPC; effective on January 1, 2017.*
2. *Errata to correct editorial errors within the preface as well as throughout various chapters in this code. Effective January 1, 2017.*

