

REVISION RECORD
FOR THE STATE OF CALIFORNIA
ERRATA

January 1, 2020

2019 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 2019 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 You may wish to retain the superseded material with this revision record so that the prior wording of any section can be easily ascertained.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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**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	1R	2	3	4									5
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	X			
Chapter/Section																							
<i>Division I – California Administration</i>																							
1.1.1	X		X	X	X	X		X	X	X	X	X	X	X	X								
1.1.2	X		X	X	X	X		X	X	X	X	X	X	X	X								
1.1.3	X		X	X	X	X		X	X	X	X	X	X	X	X								
1.1.4	X		X	X	X	X		X	X	X	X	X	X	X	X								
1.1.5	X		X	X	X	X		X	X	X	X	X	X	X	X								
1.1.6	X		X	X	X	X		X	X	X	X	X	X	X	X								
1.1.7	X		X	X	X	X		X	X	X	X	X	X	X	X								
1.1.8	X		X	X	X	X		X	X	X	X	X	X	X	X								
1.1.9	X		X	X	X	X		X	X	X	X	X	X	X	X								
1.1.10	X		X	X	X	X		X	X	X	X	X	X	X	X								
1.1.11	X		X	X	X	X		X	X	X	X	X	X	X	X								
1.1.12	X		X	X	X	X		X	X	X	X	X	X	X	X								
1.2.0	X	X																					
1.3.0																X							
1.4.0																					X		
1.6.0																		X					
1.7.0																	X						
1.8.0				X	X	X																	
1.9.0								X	X														
1.9.1								X															
1.9.1.1								X															
1.9.2								X	X														
1.9.2.1								X															
1.9.2.1.1								X															
1.9.2.2									X														
1.9.2.2.1									X														
1.10.1										X	X												
1.10.2												X											
1.10.3													X										
1.10.4														X									
1.10.5															X								
1.11.0			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	1R	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		X	
Chapter/Section																						
1.13.0																						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 1.11.0.

**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	1R	2	3	4	5								
Adopt Entire Chapter			X																				
Adopt Entire Chapter as amended (amended sections listed below)	X			X	X	X		X	X	X	X	X	X	X									
Adopt only those sections that are listed below		X															X	X					
Chapter/Section																							
203.0				X	X			X	X														
204.0				X	X																		
205.0	X	X		X		X											X						
206.0	X	X		X	X	X												X					
207.0	X	X		X	X	X																	
208.0																	X						
209.0	X	X		X																			
210.0										X	X	X	X	X	X								
211.0	X	X		X																			
214.0				X	X																		
215.0	X	X		X																			
216.0				X	X																		
217.0	X	X		X																			
220.0	X	X		X														X					
221.0	X	X		X						X	X	X	X	X	X								
222.0	X	X		X						X	X	X	X	X	X								
223.0	X	X		X													X						
225.0				X																			

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**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	1R	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																						
Chapter/Section																						
301.3				X																		
301.3.1				†	†																	
301.3.1.1				†	†																	
301.3.1.2				†	†																	
301.4.1								X	X													
301.6				X																		
303.1 <i>Exception</i>				X																		
304.1 <i>Exception</i>				X																		
310.9										X	X	X	X	X	X							
310.10										X	X		X	X	X							
310.11			X																			
310.12										X	X	X		X	X							
310.13										X	X			X	X							
312.2				X	X			X	X													
312.7			X	X	X			X	X													
312.11								X	X													
313.8										X	X	X	X	X	X							
319.0										X	X	X	X	X	X							
321.0										X	X	X	X	X	X							
322.0										X	X	X		X	X							

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**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	1R	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	X			X	
Adopt only those sections that are listed below		X				X	X									X						
Chapter/Section																						
Note Under Title							X															
401.3	X			X				X	X	X	X	X	X	X	X							
403.1						X																
403.2						X																
403.3						X																
407.2				X																		
407.2.1				X																		
407.2.2				X																		
407.2.3				X	X																	
407.2.4				X																		
407.2.4.1		X						X	X													
408.2				X																		
408.2.1		X						X	X													
408.2.2		X						X	X													
408.5								X	X													
408.6 & Exception 1				X		X																
411.2				X	X			X	X													
411.2.2				X	X																	
411.2.2.1		X						X	X													X
411.2.3				X	X																	
411.2.4		X						X	X													X
412.1				X	X			X	X													
412.1.1		X						X	X													
412.1.2		X						X	X													
412.1.3		X		X	X			X	X													
412.1.3.1		X																				
413.2										X	X	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	X													
420.2.2				X																		
422.1	X							X	X	X	X	X	X	X	X							
Table 422.1	X			X	X	X	X	X	X	X	X	X	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	1R	2	3	4	5								
Adopt Entire Chapter																							
Adopt Entire Chapter as amended (amended sections listed below)	X			X	X			X	X	X	X	X	X	X	X		X	X			X		
Adopt only those sections that are listed below		X				X	X									X							
Chapter/Section																							
422.1.2							X																
422.1.3										X	X	X	X	X	X								
422.2				†	†																		
422.2 Exceptions										†	†	†	†	†	†								
422.3.1 & Exception										X	X	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	X	X								
Table 4-3	X																	X					
Table 4-4	X																X						

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**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	1R	2	3	4	5								
Adopt Entire Chapter	X									X	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: †

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**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	1R	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					
Adopt only those sections that are listed below			X												X		X		X			
Chapter/Section																						
601.2 Exceptions		X		X	X													X				
601.2.1				X																		
601.3.2				X	X																	
601.3.3		X		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					X	X													
604.1 Exception										X	X	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			X	X													
604.13	X			X	X																	
605.2.2				X	X																	
605.9								X	X	X	X	X	X	X								
605.9.1								X	X	X	X	X	X	X								
605.10	X			X	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	X	X	X								
606.8										X	X	X	X	X								
607.1								X	X													
609.9										X	X	X	X	X	X							
609.10				†	†																	
Table 610.3		X		X	X																	
612.0			X																			
613.0 & Subsections										X	X	X	X	X	X							
Table 613.1										X	X	X	X	X	X							
614.0 & Subsections										X	X	X	X	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	1R	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					
Adopt only those sections that are listed below			X													X		X		X		
Chapter/Section																						
615.0 - 615.3										X	X	X	X	X	X							
615.4										X												

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

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605.7.1.1 Compression Joints. Compression joints for PE-AL-PE pipe or tubing and fittings shall be joined through the compression of a split ring, by a compression nut around the circumference of the pipe. The compression nut and split ring shall be placed around the pipe. The ribbed end of the fitting shall be inserted into the pipe until the pipe contacts the shoulder of the fitting. Position and compress the split ring by tightening the compression nut onto the insert fitting.

605.8 PE-RT. Polyethylene of raised temperature (PE-RT) tubing and fitting joining methods and shall comply with Section 605.8.1.

605.8.1 Mechanical Joints. Fittings for PE-RT tubing shall comply with the applicable standards listed in Table 604.1. Mechanical joints for PE-RT tubing shall be installed in accordance with the manufacturer's installation instructions.

605.9 PEX Plastic Tubing and Joints. PEX plastic tubing and fitting joining methods shall be installed in accordance with the manufacturer's installation instructions and shall comply with Section 605.9.1 through Section 605.9.3.

All PEX pipe installed in California must provide at least 30-day UV protection. [OSHPD 1, 1R, 2, 3, 4 & 5] Installation and use of PEX tubing shall be in accordance with manufacturer's standards. PEX piping shall not be used for any application that would result in noncompliance with any provisions of the California Building Standards Code.

605.9.1 Fittings. Fittings for PEX tubing shall comply with the applicable standards referenced in Table 604.1. PEX tubing that complies with ASTM F876 shall be marked with the applicable standard designation for the fittings, specified by the tubing manufacturer for use with the tubing. *Brass fittings used with PEX tubing shall meet or exceed NSF 14-2009 standards to prevent dezincification and stress crack corrosion. [OSHPD 1, 1R, 2, 3, 4 & 5] Installation and use of PEX tubing shall be in accordance with manufacturer's standards. PEX piping shall not be used for any application that would result in non-compliance with any provisions of the California Building Standards Code.*

605.9.2 Mechanical Joints. Mechanical joints shall be installed in accordance with the manufacturer's installation instructions.

605.9.3 Push Fit Fittings. Removable and nonremovable push fit fittings that employ a quick assembly push fit connector shall comply with ASSE 1061.

605.10 PEX-AL-PEX Plastic Tubing and Joints. PEX-AL-PEX plastic pipe or tubing and fitting joining methods shall be installed in accordance with the manufacturer's installation instructions and shall comply with Section 605.10.1 and Section 605.10.1.1.

[DSA-SS, DSA-SS/CC, BSC, HCD 1 & HCD 2] PEX-AL-PEX is not adopted for use in potable water supply and distribution systems.

605.10.1 Mechanical Joints. Mechanical joints between PEX-AL-PEX tubing and fittings shall include mechanical and compression type fittings and insert fit-

tings with a crimping ring. Insert fittings utilizing a crimping ring shall comply with ASTM F1974 or ASTM F2434. Crimp joints for crimp insert fittings shall be joined to PEX-AL-PEX pipe by the compression of a crimp ring around the outer circumference of the pipe, forcing the pipe material into annular spaces formed by ribs on the fitting.

[BSC] PEX-AL-PEX is not adopted for use in potable water supply and distribution systems.

605.10.1.1 Compression Joints. Compression joints shall include compression insert fittings and shall be joined to PEX-AL-PEX pipe through the compression of a split ring or compression nut around the outer circumference of the pipe, forcing the pipe material into the annular space formed by the ribs on the fitting.

[BSC] PEX-AL-PEX is not adopted for use in potable water supply and distribution systems.

605.11 Polypropylene (PP) Piping and Joints. PP pipe and fittings shall be installed in accordance with the manufacturer's installation instructions and shall comply with Section 605.11.1 through Section 605.11.3.

605.11.1 Heat-Fusion Joints. Heat-fusion joints for polypropylene (PP) pipe and fitting joints shall be installed with socket-type heat-fused polypropylene fittings, fusion outlets, butt-fusion polypropylene fittings or pipe, or electro-fusion polypropylene fittings. Joint surfaces shall be clean and free from moisture. The joint shall be undisturbed until cool. Joints shall be made in accordance with ASTM F2389 or CSA B137.11.

605.11.2 Mechanical and Compression Sleeve Joints. Mechanical and compression sleeve joints shall be installed in accordance with the manufacturer's installation instructions.

605.11.3 Threaded Joints. PP pipe shall not be threaded. PP transition fittings for connection to other piping materials shall only be threaded by use of copper alloy or stainless steel inserts molded in the fitting.

605.12 PVC Plastic Pipe and Joints. PVC plastic pipe and fitting joining methods shall be installed in accordance with the manufacturer's installation instructions and shall comply with Section 605.12.1 through Section 605.12.3.

PVC piping shall not be exposed to direct sunlight unless the piping does not exceed 24 inches (610 mm) and is wrapped with not less than 0.04 of an inch (1.02 mm) thick tape or otherwise protected from UV degradation.

605.12.1 Mechanical Joints. Mechanical joints shall be designed to provide a permanent seal and shall be of the mechanical or push-on joint. The mechanical joint shall include a pipe spigot that has a wall thickness to withstand without deformation or collapse; the compressive force exerted where the fitting is tightened. The push-on joint shall have a minimum wall thickness of the bell at any point between the ring and the pipe barrel. The elastomeric gasket shall comply with ASTM D3139, and be of such size and shape as to provide a compressive force against the spigot and socket after assembly to provide a positive seal.

605.12.2 Solvent Cement Joints. Solvent cement joints for PVC pipe and fittings shall be clean from dirt and moisture. Pipe shall be cut square and pipe shall be deburred. Where surfaces to be joined are cleaned and free of dirt, moisture, oil, and other foreign material, apply primer purple in color that complies with ASTM F656. Primer shall be applied to the surface of the pipe and fitting is softened. Solvent cement that complies with ASTM D2564 shall be applied to all joint surfaces. Joints shall be made while both the inside socket surface and outside surface of pipe are wet with solvent cement. Hold joint in place and undisturbed for 1 minute after assembly.

[HCD 1 & HCD 2] *Plastic pipe and fittings joined with solvent cement shall utilize Low VOC primer(s), if a primer is required, and Low VOC solvent cement(s) as defined in Section 214.0.*

605.12.3 Threaded Joints. Threads shall comply with ASME B1.20.1. A minimum of Schedule 80 shall be permitted to be threaded; however, the pressure rating shall be reduced by 50 percent. The use of molded fittings shall not result in a 50 percent reduction in the pressure rating of the pipe provided that the molded fittings shall be fabricated so that the wall thickness of the material is maintained at the threads. Thread sealant compound that is compatible with the pipe and fitting, insoluble in water and nontoxic shall be applied to male threads. Caution shall be used during assembly to prevent over tightening of the PVC components once the thread sealant has been applied. Female PVC threaded fittings shall be used with plastic male threads only.

605.13 Stainless Steel Pipe and Joints. Joining methods for stainless steel pipe and fittings shall be installed in accordance with the manufacturer's installation instructions and shall comply with Section 605.13.1 or Section 605.13.2.

605.13.1 Mechanical Joints. Mechanical joints shall be designed for their intended use. Such joints shall include compression, flanged, grooved, press-connect, and threaded.

605.13.2 Welded Joints. Welded joints shall be either fusion or resistance welded based on the selection of the base metal. The chemical composition of the filler metal shall comply with AWS A5.9 based on the alloy content of the piping material.

605.14 Slip Joints. In water piping, slip joints shall be permitted to be used only on the exposed fixture supply.

605.15 Dielectric Unions. Dielectric unions where installed at points of connection where there is a dissimilarity of metals shall be in accordance with ASSE 1079. **[DSA-SS, DSA-SS/CC, HCD 1 & HCD 2, OSHPD 1, 1R, 2, 3, 4 & 5]** *Dielectric unions shall be used at all points of connection where there is a dissimilarity of metals.*

605.16 Joints Between Various Materials. Joints between various materials shall be installed in accordance with the manufacturer's installation instructions and shall comply with Section 605.16.1 through Section 605.16.3.

605.16.1 Copper or Copper Alloy Pipe or Tubing to Threaded Pipe Joints. Joints from copper or copper alloy pipe or tubing to threaded pipe shall be made

using copper alloy adapter, copper alloy nipple [minimum 6 inches (152 mm)], dielectric fitting, or dielectric union in accordance with ASSE 1079. The joint between the copper or copper alloy pipe or tubing and the fitting shall be a soldered, brazed, flared, or press-connect joint and the connection between the threaded pipe and the fitting shall be made with a standard pipe size threaded joint.

605.16.2 Plastic Pipe to Other Materials. Where connecting plastic pipe to other types of piping, approved types of adapter or transition fittings designed for the specific transition intended shall be used.

605.16.3 Stainless Steel to Other Materials. Where connecting stainless steel pipe to other types of piping, mechanical joints of the compression type, dielectric fitting, or dielectric union in accordance with ASSE 1079 and designed for the specific transition intended shall be used.

606.0 Valves.

606.1 General. Valves up to and including 2 inches (50 mm) in size shall be copper alloy or other approved material. Sizes exceeding 2 inches (50 mm) shall be permitted to have cast iron or copper alloy bodies. Each gate or ball valve shall be a fullway or full-port type with working parts of the non-corrosive material. Valves carrying water used in potable water systems intended to supply drinking water shall comply with the requirements of NSF 61 and ASME A112.4.14, ASME B16.34, ASTM F1970, ASTM F2389, AWWA C500, AWWA C504, AWWA C507, IAPMO Z1157, MSS SP-67, MSS SP-70, MSS SP-71, MSS SP-72, MSS SP-78, MSS SP-80, MSS SP-110, MSS SP-122, or NSF 359.

606.2 Fullway Valve. A fullway valve controlling outlets shall be installed on the discharge side of each water meter and each unmetered water supply. Water piping supplying more than one building on one premise shall be equipped with a separate fullway valve to each building, so arranged that the water supply can be turned on or off to an individual or separate building provided; however, that supply piping to a single-family residence and building accessory thereto shall be permitted to be controlled by one valve. Such shutoff valves shall be accessible. A fullway valve shall be installed on the discharge piping from water supply tanks at or near the tank. A fullway valve shall be installed on the cold water supply pipe to each water heater at or near the water heater.

606.3 Multidwelling Units. In multidwelling units, one or more shutoff valves shall be provided in each dwelling unit so that the water supply to a plumbing fixture or group of fixtures in that dwelling unit can be shut off without stopping water supply to fixtures in other dwelling units. These valves shall be accessible in the dwelling unit that they control.

606.4 Multiple Openings. Valves used to control two or more openings shall be fullway gate valves, ball valves, or other approved valves designed and approved for the service intended.

606.5 Control Valve. A control valve shall be installed immediately ahead of each water-supplied appliance and immediately ahead of each slip joint or appliance supply.

**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	1R	2	3	4								
Adopt Entire Chapter	X																					
Adopt Entire Chapter as amended (amended sections listed below)				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	X	X							
Table 702.1		X		X	X																	
705.1.2				X	X																	
705.6.2				X	X																	
705.9.4				X	X																	
710.3				X	X																	
713.4				X																		
717.2																						
724.0 - 724.2																						
725.0																						
726.0 - 726.2																						
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 8 - INDIRECT WASTES**

(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	1R	2	3	4								
Adopt Entire Chapter	X			X	X			X	X	X	X	X	X	X								
Adopt Entire Chapter as amended (amended sections listed below)																						
Adopt only those sections that are listed below																						
Chapter/Section																						

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	1R	2	3	4	5								
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																							
903.1(2)				X				X	X														
903.1.1				X	X																		
903.1.2				X																			
903.1.3										X	X	X	X	X	X								
906.2.1										X	X	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	1R	2	3	4	5								
Adopt Entire Chapter	X							X	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																							
<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	X	X							
<i>1014.1B</i>											X	X	X	X	X	X							
<i>1014.1C</i>											X	X	X	X	X	X							
<i>1015.5</i>											X	X	X	X	X	X							
<i>1015.6</i>											X	X	X	X	X	X							

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

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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	1R	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																						
Chapter/Section																						
1101.4	X			X				X	X	X	X	X	X	X								
1101.4.2.1				X																		
1101.4.2.2										X	X	X	X	X								
1101.6 Exception				X	X																	

*This state agency does not adopt sections identified with the following symbol: †
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CALIFORNIA PLUMBING CODE – MATRIX ADOPTION TABLE
CHAPTER 13 - HEALTH CARE FACILITIES AND MEDICAL GAS AND MEDICAL VACUUM 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/CC	1	1R	2	3	4	5								
Adopt Entire Chapter			X																				
Adopt Entire Chapter as amended (amended sections listed below)																							
Adopt only those sections that are listed below										X	X	X	X	X	X								
Chapter/Section																							
1304.1.2										X	X	X	X	X	X								

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CHAPTER 13

HEALTH CARE FACILITIES AND MEDICAL GAS AND MEDICAL VACUUM SYSTEMS

Part I – General Requirements.

1301.0 General.

1301.1 Applicability. This chapter applies to the special fixtures and systems in health care facilities; the special plumbing requirements for such facilities; and the installation, testing, and verification of Categories 1, 2, and 3 medical gas and medical vacuum piping systems, except as otherwise indicated in this chapter, from the central supply system to the station outlets or inlets in hospitals, clinics, and other health care facilities. Other plumbing in such facilities shall comply with other applicable sections of this code. For Category 3 medical gas systems, only oxygen and nitrous oxide shall be used.

1301.2 Where Not Applicable. This chapter does not apply to the following except as otherwise addressed in this chapter:

- (1) Cylinder and container management, storage, and reserve requirements
- (2) Bulk supply systems
- (3) Electrical connections and requirements
- (4) Motor requirements and controls
- (5) Systems having nonstandard operating pressures
- (6) Waste anesthetic gas disposal (WAGD) systems
- (7) Surface-mounted medical gas rail systems
- (8) Breathing air replenishment (BAR) systems
- (9) Portable compressed gas systems
- (10) Medical support gas systems
- (11) Gas-powered device supply systems
- (12) Scavenging systems

1301.3 Conflict of Requirements. The requirements of this chapter shall not be interpreted to conflict with the requirements of NFPA 99. For requirements of portions of medical gas and vacuum systems not addressed in this chapter or medical gas and vacuum systems beyond the scope of this chapter refer to NFPA 99.

1301.4 Terms. Where the terms medical gas or medical support gas occur, the provisions shall apply to all piped systems for oxygen, nitrous oxide, medical air, carbon dioxide, helium, nitrogen, instrument air, and mixtures thereof. Whenever the name of a specific gas service occurs, the provision shall apply only to that gas. [NFPA 99:5.1.1.3]

1301.5 Where Required. Construction and equipment requirements shall be applied only to new construction and new equipment, except as modified in individual chapters. [NFPA 99:1.3.2]

1301.6 Existing Systems. Only the altered, renovated, or modernized portion of an existing system or individual component shall be required to meet the installation and equipment requirements stated in this code. If the alteration, renovation, or modernization adversely impact the existing performance requirements of a system or component, addi-

tional upgrading shall be required. An existing system that is not in strict compliance with the provisions of this code shall be permitted to be continued in use, unless the Authority Having Jurisdiction has determined that such use constitutes a distinct hazard to life. [NFPA 99:1.3.2.1 – 1.3.2.3]

1302.0 Design Requirements.

1302.1 Building System Risk Categories. Activities, systems, or equipment shall be designed to meet Category 1 through Category 4 requirements as detailed in this code. [NFPA 99:4.1]

1302.1.1 Risk Assessment. Categories shall be determined by following and documenting a defined risk assessment procedure. [NFPA 99:4.2.1]

1302.1.2 Documented Risk Assessment. A documented risk assessment shall not be required for Category 1. [NFPA 99:4.2.2]

1302.2 Patient Care Spaces. The governing body of the facility or its designee shall establish the following areas in accordance with the type of patient care anticipated (see definition of patient care spaces in Chapter 2):

- (1) Category 1 spaces
- (2) Category 2 spaces
- (3) Category 3 spaces
- (4) Category 4 spaces [NFPA 99:1.3.4.1]

1302.3 Anesthesia. It shall be the responsibility of the governing body of the health care organization to designate anesthetizing locations. [NFPA 99:1.3.4.2]

1302.4 Wet Procedure Locations. It shall be the responsibility of the governing body of the health care organization to designate wet procedure locations. [NFPA 99:1.3.4.3]

1303.0 Health Care Facilities.

1303.1 Drinking Fountain Control Valves. Drinking fountain control valves shall be flush-mounted or fully recessed where installed in corridors or other areas where patients are transported on a gurney, bed, or wheelchair.

1303.2 Psychiatric Patient Rooms. Piping and drain traps in psychiatric patient rooms shall be concealed. Fixtures and fittings shall be resistant to vandalism.

1303.3 Locations for Ice Storage. Ice makers or ice storage containers shall be located in nursing stations or similarly supervised areas to minimize potential contamination.

1303.4 Sterilizers and Bedpan Steamers. Sterilizers and bedpan steamers shall be installed in accordance with the manufacturer's installation instructions and comply with Section 1303.4.1 and Section 1303.4.2.

1303.4.1 Drainage Connections. Sterilizers and bedpan steamers shall be connected to the sanitary drainage system through an air gap in accordance with Section

801.2. The size of indirect waste piping shall be not less than the size of the drain connection on the fixture. Each such indirect waste pipe shall not exceed 15 feet (4572 mm) in length and shall be separately piped to a receptor. Such receptors shall be located in the same room as the equipment served. Except for bedpan steamers, such indirect waste pipes shall not require traps. A trap having a seal of not less than 3 inches (76 mm) shall be provided in the indirect waste pipe for a bedpan steamer.

1303.4.2 Vapor Vents and Stacks. Where a sterilizer or bedpan steamer has provision for a vapor vent and such a vent is required by the manufacturer, the vent shall be extended to the outdoors above the roof. Sterilizer and bedpan steamer vapor vents shall be installed in accordance with the manufacturer's installation instructions and shall not be connected to a drainage system vent.

1303.5 Aspirators. Provisions for aspirators or other water-supplied suction devices shall be installed with the specific approval of the Authority Having Jurisdiction. Where aspirators are used for removing body fluids, they shall include a collection container to collect liquids and solid particles. Aspirators shall indirectly discharge to the sanitary drainage system through an air gap in accordance with Section 806.1. The potable water supply to an aspirator shall be protected by a vacuum breaker or equivalent backflow protection device in accordance with Section 603.5.9.

1303.6 Drains. Drains shall be installed on dryers, after-coolers, separators, and receivers.

1303.7 Clinical Sinks. Clinical sinks shall be installed in accordance with the manufacturer's installation instructions and shall comply with Section 1303.7.1.

1303.7.1 Drainage Connection. Clinical sinks shall be directly connected to the sanitary drainage system and shall be provided with approved flushing devices installed in accordance with Section 413.1.

1303.8 Water Supply for Hospitals. Hospitals shall be provided with not less than two approved potable water sources that are installed in such a manner as to prevent the interruption of water service.

1304.0 Medical Gas and Medical Vacuum Piping Systems.

1304.1 General. The installation of medical gas and medical vacuum piping systems shall comply with the requirements of this chapter.

|| **1304.1.1 [OSHPD 1, 1R, 2, 3, 4 & 5]** *Medical gas systems for health care facilities that are regulated by OSHPD (hospitals, skilled nursing facilities, and intermediate care facilities, licensed clinics, and correctional treatment centers) shall be in accordance with NFPA 99, Standard for Health Care Facilities. See California Building Code Table 1224.4.6.1 for location and number of station outlets for oxygen, vacuum, and medical air.*

1304.2 Manufacturer's Instructions. The installation of individual components shall be made in accordance with the instructions of the manufacturer. Manufacturer's instructions shall include directions and information deemed by the man-

ufacturer to be adequate for attaining proper operation, testing, and maintenance of the medical gas and vacuum systems. Copies of the manufacturer's instructions shall be left with the system owner. [NFPA 99:5.1.10.11.8.1 – 5.1.10.11.8.3]

1304.3 Category 2 Piped Medical Gas and Medical Vacuum. Category 2 piped gas or piped vacuum system requirements shall be permitted when all of the following criteria are met:

- (1) Only moderate sedation; minimal sedation, as defined in Chapter 2; or no sedation is performed. Deep sedation and general anesthesia shall not be permitted.
- (2) The loss of the piped gas or piped vacuum systems is likely to cause minor injury to patients, staff, or visitors.
- (3) The facility piped gas or piped vacuum systems are intended for Category 2 patient care space as defined in Chapter 2. [NFPA 99:5.2.1.2]

1304.4 Category 3 Piped Medical Gas and Medical Vacuum. Category 3 piped gas and vacuum systems shall be permitted when all of the following criteria are met:

- (1) Only moderate sedation; minimal sedation, as defined in Chapter 2; or no sedation is performed. Deep sedation and general anesthesia shall not be permitted.
- (2) The loss of the piped gas and vacuum systems is not likely to cause injury to patients, staff, or visitors, but can cause discomfort.
- (3) The facility piped gas and vacuum systems are intended for Category 3 or Category 4 patient care rooms per Chapter 2. [NFPA 99:5.3.1.2]

1304.5 Certification of Systems. Certification of medical gas and vacuum systems shall comply with the requirements of Section 1319.0.

1304.6 Construction Documents. Before a medical gas or medical vacuum system is installed or altered in a hospital, medical facility, or clinic, duplicate construction documents shall be filed with the Authority Having Jurisdiction. Approval of the plans shall be obtained before issuance of a permit by the Authority Having Jurisdiction.

1304.6.1 Requirements. Construction documents shall show the following:

- (1) Plot plan of the site, drawn to scale, indicating the location of existing or new cylinder storage areas, property lines, driveways, and existing or proposed buildings.
- (2) Piping layout of the proposed piping system or alteration, including alarms, valves, the origin of gases, user outlets, and user inlets. The demand and loading of piping, existing or future, shall also be indicated.
- (3) Complete specification of materials.

1304.6.2 Extent of Work. Construction documents submitted to the Authority Having Jurisdiction shall clearly indicate the nature and extent of the work proposed and shall show in detail that such work will be in accordance with the provisions of this chapter.

1304.6.3 Record. A record of as-built plans and valve identification records shall remain on the site.

**CALIFORNIA PLUMBING CODE – MATRIX ADOPTION TABLE
CHAPTER 14 - FIRESTOP PROTECTION**

(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	1R	2	3	4	5								
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																							
Chapter/Section																							

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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/CC	1	1R	2	3	4									5
Adopt Entire Chapter	X									X	X	X	X	X	X								
Adopt Entire Chapter as amended (amended sections listed below)				X	X																		
Adopt only those sections that are listed below		X																X					
Chapter/Section																							
1501.0																						X	
1501.1	X	X		X																		X	
1501.1.1				X																		X	
1501.2 & Exceptions	X	X		X																		X	
1501.3 & Exception	X	X		X																		X	
1501.4																						X	
Table 1501.5	X	X		†																			
1501.5 & Exception	X	X		X																		X	
1501.5.1	X	X		X																		X	
1501.6	X	X		X																		X	
1501.7	X	X		X																		X	
1501.8																						X	
1501.9		X		X	X	X																X	
1501.9.1		X		X	X	X																X	
1501.9.2		X		X	X																	X	
1501.10																						X	
1502.0																						X	
1502.1		X		X																		X	
1502.1 Exception																						X	
1502.3		X		X																			
1502.3.2		X		X																			
1502.3.3		X		X																			
1502.3.4	†			†	†																		
1502.4 Exception																						X	
1502.5 - 1502.6																						X	
1503.0		X																					
1503.1 - 1503.1.3		X		X																			
1503.2 - 1503.2.3		X		X																			
1503.3 & Exceptions		X		X																		X	
1503.4 Exception		X		X																			
Table 1503.4		X		X																			
1503.5 Exception		X		X																			
1503.6		X		X																			
1503.7 Exceptions 2 & 3		X		X																			
1503.8 Exception		X		X																			
1503.8.1				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/CC	1	1R	2	3	4								
Adopt Entire Chapter	X									X	X	X	X	X	X							
Adopt Entire Chapter as amended (amended sections listed below)				X	X																	
Adopt only those sections that are listed below		X															X					
Chapter/Section																						
1503.8.2.1		X																				
1503.8.2.2		X																				
1503.8.2.3		X																				
1503.8.3				X																		
1503.9		X		X																		
1503.9.1				X																		
1503.9.3		X		X																		
1503.9.4		X		X																		
1504.3 Exceptions 1 & 2		X		X																		
1504.4 Note				X																		
Table 1504.2		X		X																		
1504.5 - 1504.5.3		X		X																		
Table 1504.5.3		X		X																		
1504.8		X		X																		
1504.9				X																		
1504.9.1		X		X																		
1504.11				X																		
1505.0 - 1505.15	†	†		†														X				
1506.0		X		X																		
1506.1		X		X																		
1506.2		X		X																		
1506.3		X		X																		
1506.4 & Exceptions		X		X														X				
1506.5		X																				
1506.6		X		X																		
1506.7		X		X																		
1506.8		X		X																		
1506.9 - 1506.9.6		X		X																		
1506.11		X		X	X																	
1506.12		X		X																		

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CHAPTER 15

ALTERNATE WATER SOURCES FOR NONPOTABLE APPLICATIONS

1501.0 General.

1501.1 Applicability [BSC-CG, DWR & 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 instead 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 licensed person who demonstrates competency to design the alternate water source system as required by the Authority Having Jurisdiction. Components, piping, and fittings used in an alternate water source system shall be listed.

[BSC-CG & HCD 1] *Irrigation design plans shall meet the requirements of the California Code of Regulations, Title 23, Division 2, Chapter 2.7, Model Water Efficient Landscape Ordinance.*

Exceptions:

- (1) A registered design professional is not required to design gray water systems having a maximum discharge capacity of 250 gallons per day (gal/d) (0.011 L/s) for single family and multi-family dwellings.

- (2) A registered design professional is not required to design an on-site treated nonpotable water system for single-family dwellings having a maximum discharge capacity of 250 gal/d (0.011 L/s).

1501.3 Permit [BSC-CG, HCD 1, DWR]. 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 *its* premises without first obtaining a permit to do such work from the Authority Having Jurisdiction. *No changes or connections shall be made to either the alternate water source system or the potable water system within a site containing an alternate water source system without approval by the Authority Having Jurisdiction.*

Exception: [BSC-CG, HCD 1] *A construction permit shall not be required for a clothes washer system meeting the requirements of Section 1503.1.1.*

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

1501.5 Maintenance and Inspection [BSC-CG, HCD 1, DWR]. Alternate water source systems and components shall be inspected and maintained in accordance with the *manufacturer's recommendations and/or as required by the Authority Having Jurisdiction.* **[BSC-CG]** *Where no manufacturer's recommendations exist, additional recommendations are listed in Table 1501.5.*

**TABLE 1501.5 [BSC-CG]
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.*

Exception: [DWR] Recycled water supply systems that are within or a part of a building shall comply with Section 1505.15.

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 [BSC-CG, HCD 1]. An operation and maintenance manual for gray water and on-site treated *nonpotable* water systems required to have a permit in accordance with Section 1501.3 and Section 1506.2 shall be supplied to the building owner by the system designer or installer. The operation and maintenance manual shall include the following:

- (1) *Diagram(s)* of the entire system and the location of system components.
- (2) Instructions for operating and maintaining the system.
- (3) *Instructions* 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.*

[DWR] An operation and maintenance manual for recycled water supply systems required to have a permit in accordance with Section 1501.3 and Section 1505.2 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) *Details on startup, shutdown, and deactivating the system for maintenance, repair, or other purposes.*
- (4) *Applicable testing, inspection, and maintenance frequencies in accordance with Section 1501.5 or Section 1503.15 as applicable.*
- (5) *A method of contacting the installer and/or manufacturer(s).*
- (6) *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 [BSC-CG, HCD 1, DWR]. 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. **[BSC-CG & HCD 1]**

Water quality requirements for on-site treated nonpotable graywater shall comply with Section 1506.9.2. [DWR] Recycled water shall comply with the water quality requirements of Section 1505.14.

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.

1501.9 Signage [BSC-CG, HCD 1, HCD 2, HCD 1-AC]. Signage for on-site treated nonpotable gray water shall comply with Sections 1501.9.1 and 1501.9.2. **[DWR]** Signage for reclaimed (recycled) water shall comply with Section 1505.12.

1501.9.1 Commercial, Industrial, Institutional, and Residential Restroom Signs. A sign shall be installed in restrooms in commercial, industrial, and institutional occupancies and in residential common use areas using reclaimed (recycled) water and on-site treated *nonpotable* gray water, for water closets, urinals, or both. Signs shall comply with all applicable requirements of the California Building Code. Each sign shall contain 1/2 of an inch (12.7 mm) letters of a highly visible color on a contrasting background. The location of the sign(s) shall be such that the sign(s) are visible to users. The location of the sign(s) shall be approved by the Authority Having Jurisdiction and shall contain the following text:

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

1501.9.2 Equipment Room Signs. Each room containing reclaimed (recycled) water and on-site treated *nonpotable* 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: ON-SITE TREATED NONPOTABLE GRAYWATER, 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 WATER, accordingly.

1501.10 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.

1502.0. Inspection and Testing.

1502.1 General. Alternate water source systems shall be inspected and tested in accordance with Section 1502.2 through Section 1502.3.3, and/or as required by the Authority Having Jurisdiction.

**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/CC	1	1R	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																					
1601.2	X			X																		
1601.3 & Exceptions 1 & 2	X			X	X																	
1601.5				X	X																	
1601.6	X			X																		
1601.7	X			X																		
1602.4	X			X																		
1602.7 (Ref. 1602.7.3)	X																					
1602.9.3	X																					
1602.9.4	X			X																		
1602.9.6	X																					
1602.9.6.1	X			X																		
Table 1602.9.6	X			X																		
1603.4	X			X																		
1603.5	X			X																		
1603.6	X			X																		
1603.7 A, B	X			X																		
1603.9	X			X																		
1603.15				X																		
1604.1 - 1604.3	X			X																		
1605.3	X			X																		
1605.3.2	X			X																		
1605.3.3	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 1.11.0.

1602.9.2 Deactivation and Drainage for Cross-Connection Test. The rainwater catchment system and the potable water system within the building shall be provided with the required appurtenances (e.g., valves, air or vacuum relief valves, etc.) to allow for deactivation or drainage as required for a cross-connection test in accordance with Section 1605.3.

1602.9.3 Rainwater Catchment System Surfaces. Rainwater shall be collected from roof surfaces or other impervious manmade, above-ground collection surfaces. Rainwater collected from surface water runoff, vehicular parking surfaces or manmade surfaces at or below grade shall comply with the water quality requirements for on-site treated nonpotable gray water in Section 1504.0.

Exception: Collected rainwater or storm water used exclusively for subsurface landscape irrigation.

» **1602.9.4 Other Surfaces.** Natural precipitation collected from surface water runoff, vehicular parking surfaces, or manmade surfaces at or below grade shall be in accordance with the water quality requirements for on-site treated nonpotable gray water systems in Section 1506.0.

Exception: Collected rainwater or storm water used exclusively for subsurface landscape irrigation.

» **1602.9.5 Prohibited Discharges.** Overflows and bleed-off pipes from roof-mounted equipment and appliances shall not discharge onto roof surfaces that are intended to collect rainwater.

» **1602.9.6 Minimum Water Quality.** The minimum water quality for harvested rainwater shall meet the applicable water quality requirements for the intended

applications as determined by the Authority Having Jurisdiction. In the absence of water quality requirements determined by the Authority Having Jurisdiction, the minimum treatment and water quality shall be in accordance with Table 1602.9.6.

Exception: [BSC] No treatment is required for rainwater used for non-spray irrigation where the maximum storage volume is less than 5000 gallons (18 927 L) where the tank is supported directly upon grade and the ratio of height to diameter or width does not exceed 2 to 1.

1602.9.6.1 Disinfection. Where the initial quality of the collected rainwater requires disinfection or other treatment or both, the collected rainwater shall be treated as necessary to ensure the required water quality is delivered at the point of use. Where chlorine is used for disinfection or treatment, water shall be tested for residual chlorine in accordance with ASTM D1253. The levels of residual chlorine shall not exceed the levels allowed for the intended use in accordance with the requirements of the local Enforcing Agency.

1603.0 Rainwater Storage Tanks.

1603.1 General. Rainwater storage tanks shall be constructed and installed in accordance with Section 1603.2 through Section 1603.9.

1603.2 Construction. Rainwater storage tanks shall be constructed of solid, durable materials not subject to excessive corrosion or decay and shall be watertight.

**TABLE 1602.9.6
MINIMUM TREATMENT AND WATER QUALITY FOR RAINWATER**

APPLICATION	MINIMUM TREATMENT	MINIMUM WATER QUALITY
Car washing	Debris excluder or other approved means in compliance with Section 1603.14	N/A
	100 Micron (100 µm) in compliance with Section 1603.15 for drip irrigation	
Surface, subsurface and drip irrigation	Debris excluder or other approved means in compliance with Section 1603.14	N/A
	100 Micron (100 µm) in compliance with Section 1603.15 for drip irrigation	
Spray irrigation where the maximum storage volume is less than 360 gallons (1363 L)	Debris excluder or other approved means in compliance with Section 1603.14	N/A
Spray irrigation where the maximum storage volume is equal to or greater than 360 gallons (1363 L)	Debris excluder or other approved means in compliance with Section 1603.14	Escherichia coli: < 100 CFU/100 ml Turbidity: < 10 NTU
Urinal and water closet flushing, clothes washing, and trap priming	Debris excluder or other approved means in compliance with Section 1603.14	Escherichia coli: < 100 CFU/100 ml
	100 Micron (100 µm) in compliance with Section 1603.15	Turbidity: < 10 NTU
Ornamental fountains and other water features	Debris excluder or other approved means in compliance with Section 1603.14	Escherichia coli: < 100 CFU/100 ml Turbidity: < 10 NTU
Cooling tower make up water	Debris excluder or other approved means in compliance with Section 1603.14	Escherichia coli: < 100 CFU/100 ml
	100 Micron (100 µm) in compliance with Section 1603.15	Turbidity: < 10 NTU

»» **1603.3 Location.** Rainwater storage tanks shall be permitted to be installed above or below grade.

»» **1603.4 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*.

Exception: *Tanks may be installed directly on grade in accordance with 1601.3.*

»» **1603.5 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/ft²) (1465 kg/m²) 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.

»» **1603.6 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.*

»» **1603.6.1 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.

»» **1603.7 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 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.*

1603.8 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.”

1603.9 Storage Tank Venting. Where venting using 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 1/16 of an inch (2.4 mm) mesh screen to prevent the entry of vermin and insects. *Tank vent pipes shall not be connected to the sanitary drainage system vent.*

1603.10 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.

1603.11 Roof Drains. Primary and secondary roof drains, conductors, leaders, and gutters shall be designed and installed in accordance with this code.

1603.12 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.

1603.13 Freeze Protection. Tanks and piping installed in locations subject to freezing shall be provided with an approved means of freeze protection.

1603.14 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.

1603.15 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 systems.

1603.16 Roof Gutters. Gutters shall maintain a minimum slope and be sized in accordance with Section 1103.3.

1604.0 Signs.

1604.1 General. Signs in buildings using rainwater shall be in accordance with Section 1604.2 and Section 1604.3, *and applicable requirements of the California Building Code.*

» **1604.2 Commercial, Industrial, Institutional and Residential Restroom Signs.** A sign shall be installed in restrooms in commercial, industrial, and institutional occupancies, *and in residential common use areas* using non-potable rainwater for water closets, urinals, or both. *Signs shall comply with all applicable requirements of the California Building Code.* Each sign shall contain the following text: TO CONSERVE WATER, THIS BUILDING USES RAINWATER TO FLUSH TOILETS AND URINALS.

» **1604.3 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.

» **1605.0 Inspection and Testing.**

» **1605.1 General.** Rainwater catchment systems shall be inspected and tested in accordance with Section 1605.2 and Section 1605.3.

» **1605.2 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 the inspection, or by other means as approved by the Authority Having Jurisdiction. Seams and joints shall be exposed during the inspection and checked for watertightness.

» **1605.3 Cross-Connection Inspection and Testing.** An initial inspection and test in accordance with Section 1602.5 shall be performed on both the potable and rainwater catchment water systems. The potable and rainwater catchment water systems shall be isolated from each other and independently inspected and tested to ensure there is no cross-connection in accordance with Section 1605.3.1 through Section 1605.3.3.

» **1605.3.1 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) Pumps, equipment, equipment room signs, and exposed piping in an equipment room shall be checked.

» **1605.3.2 Cross-Connection Test.** *A cross-connection test shall be performed* in the presence of the Authority Having Jurisdiction *or* other authorities having jurisdiction to determine whether a cross-connection has occurred as follows:

- (1) The potable water system shall be activated and pressurized. The rainwater catchment water system shall be shut down and completely drained.

- (2) The potable water system shall remain pressurized for a minimum period of time specified by the Authority Having Jurisdiction while the rainwater catchment water system is empty. The minimum period the rainwater catchment water system is to remain depressurized shall be determined on a case-by-case basis, taking into account the size and complexity of the potable and rainwater catchment water distribution systems, but in no case shall that period be less than 1 hour.

- (3) Fixtures, potable, and rainwater shall be tested and inspected for flow. Flow from a rainwater catchment water system outlet shall indicate a cross-connection. No flow from a potable water outlet shall indicate that it is connected to the rainwater water system.

- (4) The drain on the rainwater catchment water system shall be checked for flow during the test and at the end of the period.

- (5) The potable water system shall then be completely drained.

- (6) The rainwater catchment water system shall then be activated and pressurized. *When rainwater is not available for the initial test, a temporary connection to a potable water supply shall be required. At the conclusion of the test, the temporary connection to the potable water supply shall be disconnected.*

- (7) The rainwater catchment water system shall remain pressurized for a minimum period of time specified by the Authority Having Jurisdiction while the potable water system is empty. The minimum period the potable water system is to remain depressurized shall be determined on a case-by-case basis, but in no case shall that period be less than 1 hour.

- (8) Fixtures, potable and rainwater catchment, shall be tested and inspected for flow. Flow from a potable water system outlet shall indicate a cross-connection. No flow from a rainwater catchment water outlet shall indicate that it is connected to the potable water system.

- (9) The drain on the potable water system shall be checked for flow during the test and at the end of the period.

- (10) Where there is no flow detected in the fixtures which would indicate a cross-connection, the potable water system shall be repressurized.

1605.3.3 Discovery of Cross-Connection. In the event that a cross-connection is discovered, the following procedure shall be activated immediately: <<

- (1) Rainwater catchment water piping to the building shall be shutdown at the *supply source(s)*, and the rainwater water riser shall be drained.

- (2) Potable water piping to the building shall be shutdown at the meter.

- (3) The cross-connection shall be uncovered and disconnected.

NONPOTABLE RAINWATER CATCHMENT SYSTEMS

- (4) The building shall be retested following procedures listed in Section 1605.3.1 and Section 1605.3.2.
- (5) The potable water system shall be chlorinated with 50 ppm chlorine for 24 hours.
- (6) The potable water system shall be flushed after 24 hours, and a standard bacteriological test shall be performed. Where test results are acceptable, the potable water system shall be permitted to be recharged.



**CALIFORNIA PLUMBING CODE – MATRIX ADOPTION TABLE
CHAPTER 17 – REFERENCED STANDARDS**

(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	1R	2	3	4	5								
Adopt Entire Chapter			X							X	X	X	X	X	X								
Adopt Entire Chapter as amended (amended sections listed below)	X			X				X	X														
Adopt only those sections that are listed below																							
Chapter/Section																							
Table 1701.1	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 1.11.0.

**TABLE 1701.1 (continued)
REFERENCED STANDARDS**

STANDARD NUMBER	STANDARD TITLE	APPLICATION	REFERENCED SECTIONS
NFPA 51-2018	Design and Installation of Oxygen-Fuel Gas Systems for Welding, Cutting, and Allied Processes	Fuel Gas	507.9
NFPA 54/Z223.1-2015	National Fuel Gas Code	Fuel Gas	Chapter 5, Chapter 12
NFPA 58-2017	Liquefied Petroleum Gas Code	Fuel Gas	1208.5(6), 1208.6.7(3), 1208.6.12.4, 1212.11
NFPA 70-2017	National Electrical Code	Miscellaneous	1210.12.5(2), 1211.2.4, 1211.6, 1310.4.1, 1317.1(11)
NFPA 88A-2015	Parking Structures	Miscellaneous	507.14.1
NFPA 99-2015	Health Care Facilities Code	Miscellaneous	1301.3, 1309.8.9(6), 1317.1(9)
NFPA 211-2016	Chimneys, Fireplaces, Vents, and Solid Fuel-Burning Appliances	Fuel Gas, Appliances	509.5.2, 509.5.3, 509.5.6.1, 509.5.6.3
NFPA 409-2016	Aircraft Hangars	Miscellaneous	507.15
NFPA 780-2017	Installation of Lightning Protection Systems	Fuel Gas	1211.4
NFPA 1192-2015	Recreational Vehicles	Fuel Gas	1202.3
NSF 3-2012	Commercial Warewashing Equipment	Appliances	414.1
NSF 14-2016	Plastics Piping System Components and Related Materials	Miscellaneous	301.2.3, 604.1
NSF 42-2015	Drinking Water Treatment Units – Aesthetic Effects	Appliances	611.1
NSF 44-2015	Residential Cation Exchange Water Softeners	Appliances	611.1
NSF 53-2015	Drinking Water Treatment Units-Health Effects	Appliances	611.1
NSF 55-2016	Ultraviolet Microbiological Water Treatment Systems	Appliances	611.1
NSF 58-2015	Reverse Osmosis Drinking Water Treatment Systems	Appliances	611.1, 611.2
NSF 61-2016	Drinking Water System Components – Health Effects	Miscellaneous	415.1, 417.1, 604.1, 604.9, 606.1, 607.2, 608.2
NSF 62-2015	Drinking Water Distillation Systems	Appliances	611.1
NSF/ANSI 350-2014	Onsite Residential and Commercial Water Reuse Treatment Systems <i>Note: NSF/ANSI 350, amended sections follow: 5.6 Electrical Components. Electrical components...The California Electrical Code shall be followed for all electrical components, system installation, and system operation.</i>	Miscellaneous	1506.7, 1506.9.2
NSF 359-2016	Valves for Crosslinked Polyethylene (PEX) Water Distribution Tubing Systems	Valves	606.1
PDI G-101-2015	Testing and Rating Procedure for Hydro Mechanical Grease Interceptors with Appendix of Installation and Maintenance	DWV Components	1014.1
PDI G-102-2010	Testing and Certification for Grease Interceptors with FOG Sensing and Alarm Devices	Certification	1014.1
PDI-WH 201-2010	Water Hammer Arresters	Water Supply Components	609.10
UL 17-2008	Vent or Chimney Connector Dampers for Oil-Fired Appliances (with revisions through September 25, 2013)	Fuel Gas, Vent Dampers	509.14.1
UL 103-2010	Factory-Built Chimneys for Residential Type and Building Heating Appliances (with revisions through July 27, 2012)	Fuel Gas, Appliances	509.5.1.1, 509.5.1.2
UL 174-2004	Household Electric Storage Tank Water Heaters (with revisions through April 10, 2015)	Appliances	Table 501.1(1)
UL 263-2011	Fire Tests of Building Construction and Materials (with revisions through June 2, 2015)	Miscellaneous	1404.3, 1405.3
UL 378-2006	Draft Equipment (with revisions through September 17, 2013)	Fuel Gas, Appliances	509.14.1
UL 399-2008	Drinking Water Coolers (with revisions through October 18, 2013)	Fixtures	415.1

REFERENCED STANDARDS

**TABLE 1701.1 (continued)
REFERENCED STANDARDS**

STANDARD NUMBER	STANDARD TITLE	APPLICATION	REFERENCED SECTIONS
UL 430-2015	Waste Disposers	Appliances	419.1
UL 441-2016	Gas Vents (with revisions through July 27, 2016)	Fuel Gas, Vents	509.1
UL 467-2013	Grounding and Bonding Equipment	Miscellaneous	1211.2.5
UL 641-2010	Type L Low-Temperature Venting Systems (with revisions through June 12, 2013)	Fuel Gas	509.1
UL 651-2011	Schedule 40, 80, Type EB and A Rigid PVC Conduit and Fittings (with revisions through June 15, 2016)	Piping	1208.6.6
UL 723-2008	Test for Surface Burning Characteristics of Building Materials (with revisions through August 12, 2013)	Miscellaneous	701.2(2), 903.1(2), 1101.4
UL 732-1995	Oil-Fired Storage Tank Water Heaters (with revisions through October 9, 2013)	Fuel Gas, Appliances	Table 501.1(1)
UL 749-2013	Household Dishwashers (with revisions through May 24, 2013)	Appliances	414.1
UL 778-2016	Motor-Operated Water Pumps (with revisions through November 14, 2016)	Appliances	1101.14
UL 921-2016	Commercial Dishwashers	Appliances	414.1
UL 959-2010	Medium Heat Appliance Factory-Built Chimneys (with revisions through June 12, 2014)	Fuel Gas, Appliances	509.5.1.2
UL 1453-2016	Electric Booster and Commercial Storage Tank Water Heaters	Appliances	Table 501.1(1)
UL 1479- 2015	Fire Tests of Penetration Firestops	Miscellaneous	208.0, 222.0, 1404.3, 1405.3
UL 2523-2009	Solid Fuel-Fired Hydronic Heating Appliances, Water Heaters, and Boilers (with revisions through February 8, 2013)	Fuel Gas, Appliances	Table 501.1(1)

1701.2 Standards, Publications, Practices, and Guides. The standards, publications, practices, and guides listed in Table 1701.2 are not referenced in other sections of this code. The application of the referenced standards, publi-

cations, practices, and guides shall be as specified in Section 301.2.2. The promulgating agency acronyms are found at the end of the tables.

**TABLE 1701.2
STANDARDS, PUBLICATIONS, PRACTICES, AND GUIDES**

DOCUMENT NUMBER	DOCUMENT TITLE	APPLICATION
AHAM FWD-1-2009	Food Waste Disposers	Appliances
ASCE 25-2006	Earthquake-Actuated Automatic Gas Shutoff Devices	Fuel Gas
ASHRAE 90.1-2016	Energy Standard for Buildings Except Low-Rise Residential Buildings	Miscellaneous
ASHRAE 90.2-2007	Energy-Efficient Design of Low-Rise Residential Buildings	Miscellaneous
ASME A13.1-2007 (R2013)	Scheme for the Identification of Piping Systems	Piping
ASME A112.4.3-1999 (R2015)	Plastic Fittings for Connecting Water Closets to the Sanitary Drainage System	Fittings
ASME A112.19.10-2003 (R2008)	Dual Flush Devices for Water Closets	Fixtures
ASME A112.21.3M-1985 (R2007)	Hydrants for Utility and Maintenance Use	Valves
ASME A112.36.2M-1991 (R2012)	Cleanouts	DWV Components
ASME B1.20.3-1976 (R2013)	Dryseal Pipe Threads, (Inch)	Joints
ASME B16.33-2012	Manually Operated Metallic Gas Valves for Use in Gas Piping Systems Up to 175 psi (Sizes NPS ½ through NPS 2)	Valves
ASME B16.39-2014	Malleable Iron Threaded Pipe Unions: Classes 150, 250 and 300	Fittings
ASME B16.40-2013	Manually Operated Thermoplastic Gas Shutoffs and Valves in Gas Distribution Systems	Valves

CALIFORNIA PLUMBING CODE – MATRIX ADOPTION TABLE
APPENDIX A - RECOMMENDED RULES FOR SIZING THE WATER SUPPLY SYSTEM

(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	1R	2	3	4	5								
Adopt Entire Chapter	X			X	X			X	X	X	X	X	X	X									
Adopt Entire Chapter as amended (amended sections listed below)																							
Adopt only those sections that are listed below																							
Chapter/Section																							

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 1.11.0.

CALIFORNIA PLUMBING CODE – MATRIX ADOPTION TABLE
APPENDIX B - EXPLANATORY NOTES ON COMBINATION WASTE AND VENT 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/CC	1	1R	2	3	4	5								
Adopt Entire Chapter	X							X	X	X	X	X	X	X									
Adopt Entire Chapter as amended (amended sections listed below)																							
Adopt only those sections that are listed below																							
Chapter/Section																							

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**CALIFORNIA PLUMBING CODE – MATRIX ADOPTION TABLE
APPENDIX D - SIZING STORM WATER DRAINAGE 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/CC	1	1R	2	3	4								
Adopt Entire Chapter	X			X	X			X	X	X	X	X	X	X								
Adopt Entire Chapter as amended (amended sections listed below)																						
Adopt only those sections that are listed below																						
Chapter/Section																						

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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	CEC	CA	SL	SLC
				1	2	1-AC	AC	SS	SS/CC	1	1R	2	3	4	5								
Adopt Entire Chapter	X			X	X			X	X	X	X	X	X	X									
Adopt Entire Chapter as amended (amended sections listed below)																							
Adopt only those sections that are listed below																							
Chapter/Section																							

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HISTORY NOTE APPENDIX

CALIFORNIA PLUMBING CODE

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

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For prior history, see the History Note Appendix to the California Plumbing Code, 2016 Triennial Edition, effective January 1, 2017.

1. *(BSC 04/18, HCD 02/18, DSA-SS 04/18, OSHPD 05/18, SFM 05/18, DWR 01/18) Adoption by reference of the 2018 Uniform Plumbing Code with necessary amendments to become the 2019 California Plumbing Code, and repeal of the 2015 edition of the Uniform Plumbing Code; effective on January 1, 2020.*
2. *(BSC 02/19 CWoRE, HCD 02/19 CWoRE) Change Without Regulatory Effect to delete specified recycled water building standards declared invalid as ordered by the Superior Court of California, County of Los Angeles (Case No. BS171958—see Building Standards Commission Information Bulletin 19-02: Invalidated AB 2282 Recycled Water Building Standards). These rulemakings were approved by the California Building Standards Commission on July 17, 2019, filed with the Secretary of State on July 18, 2019, effective August 17, 2019.*
- || 3. *Erratum to correct editorial errors in Matrix Adoption Tables and miscellaneous corrections throughout chapters 13, 15, 16, and 17, effective January 1, 2020.*

