



# 2019 California Plumbing Code (CPC) Changes

## SUMMARY

Below show all the significant changes that were made to the 2019 California Plumbing Code. A few requirements have been added.

Additionally, several code sections have been reorganized, meaning the previous requirements have been included in other or new sections. A 'Section Relocation' Table has been provided on pages xix-xxi.

## SIGNIFICANT CHANGES

NEW - CHANGE	CPC SECTION/TABLE NUMBER	COMMENTARY	MASTER PLAN IMPACT YES - NO
<input type="checkbox"/> <input checked="" type="checkbox"/>	1.10.1 & 1.10.5	<b>OSHPD 1R.</b> This is an addition to OSHPD 1. This is for Non-conforming hospital buildings that have been removed from acute care services. <b>OSHPD 5.</b> A second addition is OSHPD 5 for Acute psychiatric hospital buildings.	
<input type="checkbox"/> <input checked="" type="checkbox"/>	Definitions	The following definitions have been updated: Category 1, 2, 3, Combustible Material, Critical Care Area, Medical Air, Patient Care Space for Category 1, 2, 3, and 4.	
<input checked="" type="checkbox"/> <input type="checkbox"/>	Definitions	The following definitions have been added: Joint Press-Connect, Minimal Sedation (Anxiolysis), Standard Cubic Feet per Minute (SCFM), and Toilet Facility.	
<input type="checkbox"/> <input checked="" type="checkbox"/>	Table 313.3	<b>Hangers and Supports.</b> Table has been updated.	
<input checked="" type="checkbox"/> <input type="checkbox"/>	322.0	<b>Psychiatric Services.</b> Projects associated with provision of psychiatric services, special design considerations with fixtures shall be considered to prevent injury.	
<input type="checkbox"/> <input checked="" type="checkbox"/>	402.4	<b>Wall-Hung Fixtures.</b> Floor-affixed supports for off-the floor plumbing fixtures for public use shall comply with ASME A112.6.1M. Framing-affixed supports for off-the-floor water closets with concealed tanks shall comply with ASME A112.6.2.	
<input checked="" type="checkbox"/> <input type="checkbox"/>	404.1	<b>Waste Fittings.</b> Waste fittings shall comply with ASME A112.18.2/CSA B125.2, ASTM F409 or Table 701.2 for aboveground drainage piping and fitting.	

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<input type="checkbox"/> <input checked="" type="checkbox"/>	407.2.4	<b>Metering faucets.</b> Now require a maximum of 0.2 gallons per metering cycle.	
<input type="checkbox"/> <input checked="" type="checkbox"/>	408.2	<b>Water Consumption.</b> Showerheads are required to have a maximum flow rate of no more than 1.8 gpm at 80 psi.	
<input type="checkbox"/> <input checked="" type="checkbox"/>	408.5	<b>Finished Curb or Threshold.</b> The finished floor of the receptor shall slope uniformly from the sides towards the drain not less than 1/8 inch per foot.	
<input type="checkbox"/> <input checked="" type="checkbox"/>	411.2.2	<b>Flushometer maximum flush volume</b> lowered to 1.28.	
<input checked="" type="checkbox"/> <input type="checkbox"/>	411.4	<b>Personal Hygiene Devices.</b> Water closets with integral personal hygiene devices shall comply with ASME A112.4.2/CSA B45.16.	
<input checked="" type="checkbox"/> <input type="checkbox"/>	416.2	<b>Water Supply.</b> The temperature of hot and cold water for emergency shower or eye wash stations shall be controlled by a temperature actuated mixing valve and comply with ASSE 1071.	
<input checked="" type="checkbox"/> <input type="checkbox"/>	422.2.1	<b>Single Use Toilet Facilities.</b> Single use toilet facilities and family assigned or use toilet facilities shall be identified with a sign indicating use by either sex.	
<input type="checkbox"/> <input checked="" type="checkbox"/>	Table 4-2	<b>Minimum Plumbing Facilities.</b> Spaces have been added under minimum plumbing facilities.	
<input checked="" type="checkbox"/> <input type="checkbox"/>	507.27	<b>Clearance to Combustible Materials.</b> Appliances and their vent connectors shall be installed with clearances from combustible material, so their operation does not create a hazard. Minimum clearances and vent connectors specified in Section 509.0.	
<input type="checkbox"/> <input checked="" type="checkbox"/>	509.6	<b>Gas Vents.</b> (2) Type B-W vent shall have a listed capacity of no less than that of the listed vented wall furnace to which it is connected. (3) Gas vents installed within masonry chimneys shall be installed in accordance with manufacturer's installation instructions. There shall also be a permanent label with the following language, "This gas vent is for appliances that burn gas. Do not connect to solid or liquid fuel—burning appliances or incinerators."	
<input checked="" type="checkbox"/> <input type="checkbox"/>	601.2.1	Newly constructed multiunit residential structures or residential portion of newly constructed mixed-use residential and commercial structures will be required to provide measurement of the quantity of water supplied to each individual unit by either individual water meters or submeters.	

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<input type="checkbox"/> <input checked="" type="checkbox"/>	604.5	<b>Flexible Connectors.</b> Flexible water connectors with an excess flow shutoff device shall comply with CSA B125.5/IAPMO Z600.	
<input type="checkbox"/> <input checked="" type="checkbox"/>	604.10.1	<b>Tracer Wire.</b> Plastic materials for building supply piping outside underground shall have an <i>electrically continuous corrosion-resistant</i> blue insulated copper tracer wire. The tracer wire size shall not be less than 14 AWG, and the insulation type shall be suitable for direct burial.	
<input type="checkbox"/> <input checked="" type="checkbox"/>	605.2.1.1-605.3.2.1	<b>Push Fit Fittings.</b> Removable and non-removable push fit fittings that employ a quick assembly push fit connector shall comply with ASSE 1061.	
<input type="checkbox"/> <input checked="" type="checkbox"/>	60512	<b>PVC Plastic Pipe and Joints.</b> PVC piping shall not be exposed to direct sunlight unless the piping does not exceed 24 inches and is wrapped with no less than 0.04 of an inch thick tape or otherwise protected from UV degradation.	
<input type="checkbox"/> <input checked="" type="checkbox"/>	609.4	<b>Testing.</b> Exception added. <b>Exception:</b> PEX, PP, or PE-RT tube shall be permitted to be tested with air where permitted by the manufacturer's instructions.	
<input type="checkbox"/> <input checked="" type="checkbox"/>	701.2	<b>Drainage Piping.</b> (2) Tests shall comply with all requirements of the standards to include the sample size, both for width and length. Plastic pipe shall not be tested filled with water (6) Cast-iron and fittings and the stainless-steel couplings used to join these products shall be listed and tested in accordance with table 701.2	
<input type="checkbox"/> <input checked="" type="checkbox"/>	Table 701.2	<b>Materials for Drain, Waste, Vent Pipe and Fittings.</b> Table has been updated. PVC (Sewer and Drain), PVC PSM have been added.	
<input type="checkbox"/> <input checked="" type="checkbox"/>	Table 702.1	<b>Drainage Fixture Unit Valves (DFU).</b> Table has been updated.	
<input checked="" type="checkbox"/> <input type="checkbox"/>	705.5-705.1.3	<b>Polyethylene (PE) Sewer Pipe.</b>	
<input type="checkbox"/> <input checked="" type="checkbox"/>	705.7.1	<b>Mechanical Joints.</b> Mechanical joints between stainless steel pipe and fittings shall be of the compression, grooved coupling, hydraulic press-connect fittings, or flanged.	
<input type="checkbox"/> <input checked="" type="checkbox"/>	903.1 (2)	<b>Applicable Standards.</b> ABS and PVC DWU piping shall now be installed per the firestop protection requirements in the California Building Code. Tests shall comply with all requirements of standards including the sample size, for width and length. Plastic pipe shall not be tested filled with water.	
<input type="checkbox"/> <input checked="" type="checkbox"/>	906.1	<b>Roof Termination.</b> ABS and PVC piping exposed to sunlight shall be protected by water based synthetic latex paints.	

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<input checked="" type="checkbox"/> <input type="checkbox"/>	1007.2	<b>Trap Seal Primers.</b> Potable water supply trap seal primer valves shall comply with ASSE 1018. Drainage and electronic design shall comply with ASSE 1044	
<input type="checkbox"/> <input checked="" type="checkbox"/>	Table 1014.2.1	<b>Hydromechanical Grease Interceptor Sizing Using Gravity Flow Rates.</b> Table has been updated.	
<input checked="" type="checkbox"/> <input type="checkbox"/>	1106.0	<b>Engineered Storm Drainage System. General.</b> The design and sizing of a storm drainage system shall be permitted to be determined by accepted engineering practices. <b>Siphonic Roof Drainage systems.</b> Shall comply with ASPE 45. <b>Siphonic Roof Drains.</b> Shall comply with ASME A112.6.9.	
<input type="checkbox"/> <input checked="" type="checkbox"/>	1201.1	<b>Applicability.</b> Clarification, 5 pounds-force per square inch for natural gas and 10 psi for undiluted propane.	
<input type="checkbox"/> <input checked="" type="checkbox"/>	1202.3	<b>Applications.</b> Numbers 17-20 have been added as items the code shall not apply.	
<input type="checkbox"/> <input checked="" type="checkbox"/>	1208.6.5	<b>Plastic pipe, Tubing, and Fittings.</b> Polyvinyl chloride (PVC) and chlorinated polyvinyl chloride (PCVC) plastic pipe, tubing, and fitting shall not be used to supply fuel gas.	
<input checked="" type="checkbox"/> <input type="checkbox"/>	1208.6.13.1-1208.13.5	<b>Cast Iron Flanges</b> shall be in accordance with ASME B16.1. <b>Steel Flanges</b> shall be in accordance with ASME B16.5 or ASME B16.47. <b>Non-Ferrous Flanges</b> shall be in accordance with ASME B16.24. <b>Ductile Iron Flanges</b> shall be in accordance with ASME B16.42. <b>Dissimilar Flange Connections.</b> Raised-face flanges shall not be joined to flat-faced cast iron, ductile iron or nonferrous material flanges.	
<input checked="" type="checkbox"/> <input type="checkbox"/>	1208.9-1210	<b>Overpressure Protection Devices.</b> An overpressure protection device shall be installed when the serving gas supplier delivers gas at a pressure greater than 2 psi for piping systems serving appliances designed to operate at a pressure of 14 inches water column or less.	
<input checked="" type="checkbox"/> <input type="checkbox"/>	1210.3-1210.1.3.9	<b>Protection Against Corrosion.</b> Steel pipe and steel tubing installed underground shall be installed in accordance with Section 1210.1.3.1 through 1210.1.3.9.	

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<input checked="" type="checkbox"/> <input type="checkbox"/>	1210.2.4.3	<b>Piping in Buildings.</b> Gas piping installed on roof surfaces shall be elevated above the roof surface and shall be supported in accordance with Table 1210.2.4.1.	
<input checked="" type="checkbox"/> <input type="checkbox"/>	1210.12.1 1210.12.2 1210.12.3 1210.12.4 1210.12.5 1210.12.6	<b>Required Components.</b> A central premix system with flammable mixture in the blower or compressor shall consist of the components listed in this section. <b>Optional Components.</b> Components listed in this section shall also be permitted to be utilized in any type of central premix system. <b>Additional Requirements.</b> Gas-mixing machines shall have non sparking blowers and shall be constructed so that a flashback does not rupture machine casings. <b>Special Requirements for Mixing Blowers.</b> <b>Installation of Gas-Mixing Machines.</b> Gas-mixing machines shall comply with the list provided in this section. <b>Use of Automatic Fire Checks, Safety Blowouts or Backfire Preventers.</b> Automatic fire checks, safety blowouts or backfire preventers.	
<input checked="" type="checkbox"/> <input type="checkbox"/>	1211.2.3	<b>Bonding Jumper Length.</b> The length shall not exceed 75 feet.	
<input checked="" type="checkbox"/> <input type="checkbox"/>	1212.4	<b>Injection (Bunsen) Burners.</b> Burners used in laboratories and educational facilities shall be permitted to be connected to the gas supply by an unlisted hose.	
<input type="checkbox"/> <input checked="" type="checkbox"/>	Table 1215.2(2) & Table 1215.2(3)	<b>Schedule 40 Metallic Pipe.</b> Tables have been updated	
<input type="checkbox"/> <input checked="" type="checkbox"/>	1302.2	<b>Patient Care Spaces.</b> Patient Care Rooms has been eliminated. They are now considered Categories. Category 4 spaces has been added.	
<input checked="" type="checkbox"/> <input type="checkbox"/>	1304.3 – 1304.4	<b>Category 2 Piped Medical Gas and Medical Vacuum.</b> Requirements listed for Category 2 <b>Category 3 Piped Medical Gas and Medical Vacuum.</b> Requirements listed for Category 3	
<input checked="" type="checkbox"/> <input type="checkbox"/>	1308.6	<b>Category 3 Systems.</b> This section lists exceptions for Category 3 systems.	
<input type="checkbox"/> <input checked="" type="checkbox"/>	1311	<b>Valves.</b> New or replacement valves shall follow the conditions in section 1311. <b>Security.</b> All valves, except those in zone valve box assemblies shall comply with 1311.1.1. <b>Accessibility.</b> Zone valves shall be installed in valve boxes with removable covers.	

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<input type="checkbox"/> <input checked="" type="checkbox"/>	1311.7	<b>Emergency Shutoff Valves.</b> Exceptions have been added to emergency shutoff valves for Category 3.	
<input type="checkbox"/> <input checked="" type="checkbox"/>	1312.2	<b>Materials.</b> Two additional requirements listed for materials used in central supply systems.	
<input type="checkbox"/> <input checked="" type="checkbox"/>	1314.5.1 (2)	<b>Location.</b> At least 25 feet from any door, window, air intake, or other openings in buildings or places of public assembly.	
<input checked="" type="checkbox"/> <input type="checkbox"/>	1315.2	<b>Pressure Relief Valves.</b> All pressure relief valves shall comply with the requirements in 1315.2.	
<input type="checkbox"/> <input checked="" type="checkbox"/>	1501.9.1	The following language was added to Commercial, industrial, institutional, and residential restroom. Signs shall contain 1/2 of an inch letters of a highly visible color on a contrasting background. The sign must be visible to all users and approved by the authority having jurisdiction.	
<input type="checkbox"/> <input checked="" type="checkbox"/>	1503.4	Potable water can temporarily be connected for testing the untreated graywater system.	
<input type="checkbox"/> <input checked="" type="checkbox"/>	1505.8.2	Warning signs for reclaimed (recycled) water valves shall have 3/8" letters on purple background.	
<input type="checkbox"/> <input checked="" type="checkbox"/>	1505.9	Hose Bibbs are approved for use in cemeteries supplied with reclaimed water. It must be equipped with a sign marking it as non-potable recycled water.	
<input type="checkbox"/> <input checked="" type="checkbox"/>	1505.12.2	A permanent sign shall be installed for tank-type toilets that are flushed with recycled water.	
<input type="checkbox"/> <input checked="" type="checkbox"/>	1603.5	Tanks may be installed directly on grade as an exception to location above grade.	
<input checked="" type="checkbox"/> <input type="checkbox"/>	A105.1(5)(6)(7)	<b>Chart A.</b> Charts added to Appendix A	
<input checked="" type="checkbox"/> <input type="checkbox"/>	Appendix L	<b>Reverse Osmosis Reject Water.</b> Definition added. Water that does not pass through a membrane of a reverse osmosis system.	
<input checked="" type="checkbox"/> <input type="checkbox"/>	L 408.1.1	<b>Condensate Drainage Recovery.</b> Condensate from air-conditioning, boiler and steam systems shall be in accordance with Section 1506.0.	
<input type="checkbox"/> <input checked="" type="checkbox"/>	Table 503.3.2	<b>Performance Requirements for Water-Heating Equipment Minimum Efficiency Requirements.</b> Data in the table has been updated and added.	
<input checked="" type="checkbox"/> <input type="checkbox"/>	Appendix M	<b>Peak Water Demand Calculator.</b> Appendix M has been added.	