



**COMMUNITY DEVELOPMENT DEPARTMENT  
BUILDING DIVISION**

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## 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<br>SECTION/TABLE<br>NUMBER | COMMENTARY   |
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| <input type="checkbox"/> <input checked="" type="checkbox"/> | 1.10.1 & 1.10.5                | <p><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.</p> <p><b>OSHPD 5.</b> A second addition is OSHPD 5 for Acute psychiatric hospital buildings.</p> |
| <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.  |

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| <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.  |
| <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><br>(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.<br>(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.” |

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| <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.   |
| <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.<br>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.<br><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><br>(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<br>(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.   |

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| <input type="checkbox"/>            | <input checked="" type="checkbox"/> | 903.1 (2)            | <p><b>Applicable Standards.</b> ABS and PVC DWU piping shall now be installed per the firestop protection requirements in the California Building Code.</p> <p>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.</p>  |
| <input type="checkbox"/>            | <input checked="" type="checkbox"/> | 906.1                | <p><b>Roof Termination.</b> ABS and PVC piping exposed to sunlight shall be protected by water based synthetic latex paints.</p>   |
| <input checked="" type="checkbox"/> | <input type="checkbox"/>            | 1007.2               | <p><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</p>  |
| <input type="checkbox"/>            | <input checked="" type="checkbox"/> | Table 1014.2.1       | <p><b>Hydromechanical Grease Interceptor Sizing Using Gravity Flow Rates.</b> Table has been updated.</p>  |
| <input checked="" type="checkbox"/> | <input type="checkbox"/>            | 1106.0               | <p><b>Engineered Storm Drainage System.</b></p> <p><b>General.</b> The design and sizing of a storm drainage system shall be permitted to be determined by accepted engineering practices.</p> <p><b>Siphonic Roof Drainage systems.</b> Shall comply with ASPE 45.</p> <p><b>Siphonic Roof Drains.</b> Shall comply with ASME A112.6.9.</p>   |
| <input type="checkbox"/>            | <input checked="" type="checkbox"/> | 1201.1               | <p><b>Applicability.</b> Clarification, 5 pounds-force per square inch for natural gas and 10 psi for undiluted propane.</p>   |
| <input type="checkbox"/>            | <input checked="" type="checkbox"/> | 1202.3               | <p><b>Applications.</b> Numbers 17-20 have been added as items the code shall not apply.</p>   |
| <input type="checkbox"/>            | <input checked="" type="checkbox"/> | 1208.6.5             | <p><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.</p>   |
| <input checked="" type="checkbox"/> | <input type="checkbox"/>            | 1208.6.13.11208.13.5 | <p><b>Cast Iron Flanges</b> shall be in accordance with ASME B16.1</p> <p><b>Steel Flanges</b> shall be in accordance with ASME B16.5 or ASME B16.47</p> <p><b>Non-Ferrous Flanges</b> shall be in accordance with ASME B16.24</p> <p><b>Ductile Iron Flanges</b> shall be in accordance with ASME B16.42</p> <p><b>Dissimilar Flange Connections.</b> Raised-face flanges shall not be joined to flat-faced cast iron, ductile iron or nonferrous material flanges.</p> |
| <input checked="" type="checkbox"/> | <input type="checkbox"/>            | 1208.9-1210          | <p><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.</p>   |
| <input checked="" type="checkbox"/> | <input type="checkbox"/>            | 1210.3-1210.1.3.9    | <p><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</p>  |

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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                         | <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.  |
|                                     |                                     | 1210.12.2                         | <b>Optional Components.</b> Components listed in this section shall also be permitted to be utilized in any type of central premix system.  |
|                                     |                                     | 1210.12.3                         | <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.  |
|                                     |                                     | 1210.12.4                         | <b>Special Requirements for Mixing Blowers.</b>   |
|                                     |                                     | 1210.12.5                         | <b>Installation of Gas-Mixing Machines.</b> Gas-mixing machines shall comply with the list provided in this section.  |
|                                     |                                     | 1210.12.6                         | <b>Use of Automatic Fire checks, Safety Blowouts or Backfire Preventors.</b> Automatic fire checks, safety blowouts or backfire preventors.   |
| <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<br><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.<br><b>Security.</b> All valves, except those in zone valve box assemblies shall comply with 1311.1.1<br><b>Accessibility.</b> Zone valves shall be installed in valve boxes with removeable covers. |
| <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.   |

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| <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. At least 25 feet from any door, window, air intake, or other openings in buildings or places of public assembly</b>  |
| <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"/>            | L408.1.1        | <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  |