2022 California Plumbing Code (CPC) Changes

SUMMARY

Some of the significant changes are:

New section changed permit expiration from 180 days to 12 months. Includes a provision stipulating that every permit shall remain valid if the work on the site authorized by the permit is commenced within 12 months after its issuance

New provisions for backflow prevention devices, assemblies, and methods

New drinking water treatment unit requirements for commercial equipment, alkaline water treatment and scale reduction devices

New definition and requirements for prefabricated shower enclosures

New requirements for lavatory assemblies with automatic soap dispensers, faucets, or hand dryers

New provisions for temperature limiting devices

New guards and rails requirements for installation of equipment and appliances on roofs

New requirements for the discharge of temperature and pressure relief valve piping

New provision on leak detection devices

New provisions for potable water pumps

New standards for drain, waste and vent pipe and fittings

New provisions for drain waste and vent cleanouts

Circuit vent provisions have been updated and expanded

Updated fuel gas provisions

Updated medical gas provisions, including reordering of categories for ease of use

New reference to water heater standards and water heating system requirements

Fire Sprinkler code sections moved to California Residential and California Fire Code.

SIGNIFICANT CHANGES (cont'd)

NEW - CHANGE	CPC SECTION/TABLE NUMBER	COMMENTARY	MASTER PLAN IMPACT YES - NO
☐ ☒	CPC104.4.3.1	New section changed permit expiration from 180 days to 12 months. Includes a provision stipulating that every permit shall remain valid if the work on the site authorized by the permit is commenced within 12 months after its issuance	☒ ☐
☒ ☐	205.0	**Circuit Vent** definition added. "The vent that connects to a horizontal drainage branch and vents two traps to a maximum of eight traps connected into a battery of fixtures."	☐ ☒
☒ ☐	207.0	New definition: Expansion Tank. A vessel used to protect potable water systems from excessive pressure.	☐ ☒
☒ ☐	214.0	Low Pressure Water Dispenser definition added	☐ ☒
☐ ☒	407.3	Limitation of hot water temperature for public lavatories section revised to remove previous standards and added: maximum temperature shall be regulated by 1) A limiting device conforming to either ASSE 1070/ASME A112.1070/CSA B125.70, or 2) A water heater conforming to ASSE 1084.	☐ ☒
☒ ☐	408.1, 408.5	Prefabricated shower enclosures shall comply with IAPMO IGC 154. Finished Curb or Threshold section added: Where there is a shower without a threshold, the floor space within the same room shall be considered a wet location.	☐ ☒
☒ ☐	408.3.1, 408.3.2	Gang Showers section added to section 408.3 that a single temperature-controlled water supply pipe shall be controlled by a mixing valve that complies with ASSE 1069. Temperature limiting section added defining maximum water temperature discharge from showerhead shall be limit to 120 (F) and defines 5 newly added methods of compliance.	☐ ☒
☐ ☒	409.4	Limitation of Hot Water Temperature in Bathtubs and Whirlpool Bathtubs section revised. Added new standard CSA B125.3 and added water heater conforming to ASSE 1084. "Water heater thermostat shall not be considered a control for meeting provision" was removed from code.	☐ ☒
☐ ☒	412.1.4.1	Urinals Hybrid" term was changed to Non-water Urinals with Drain Cleansing Action	☐ ☒
☒ ☐	417.6	Added Low Pressure Water Dispenser code language. Beverage faucets shall comply with ASME A112.118.1/CSA B125.1. Low pressure water dispenser that dispense electrically heated water and have a reservoir vented to the atmosphere shall comply with ASSE 1023. Electric devices that heat water shall comply with UL 499.	☐ ☒
☒ ☐	420.1	Sink Assemblies with automatic soap dispensers, faucets, or hand dryers shall comply with IAPMO IGC 127.	☐ ☒
☐ ☒	422.1, Table 422.1	Co-adopted with BSC to permit an alternate Table 4-1 (replaced Table A) as an exception which can be used if the jurisdiction has adopted it. In the 2019 edition of the CPC, DSA inadvertently omitted the language. DSA co-adopted the BSC amendment in the statement at the top	☐ ☒

SIGNIFICANT CHANGES (cont'd)

NEW - CHANGE	CPC SECTION/TABLE NUMBER	COMMENTARY	MASTER PLAN IMPACT YES - NO
		of Table 422.1 to allow usage of Table 4-1 as an alternate for calculations.	
☐ ☒	Table 501.1 (1)	Table 501.1 (1) was modified, adding the word "Storage" in the "Type" column of water heaters referenced, UL 499 (Electric Instantaneous) and reference to the standard UL 499-2014 (Electric Heater Appliances) were added to table	☐ ☒
☐ ☒	501.2	California Energy Code Water Heating System Requirements added new language. "See California Energy Code Section 110.3 for additional mandatory requirements for all service water heating systems, and 150.0(n) for additional mandatory requirements for residential service water heating systems."	☐ ☒
☐ ☒	508.2.1	"Edge of Roof" added to code section defining clearance	☐ ☒
☒ ☐	508.2.1.1 and Exception	Guards and Rails code section added. Guards or rails required where the following exist: 1) The clearance between the appliance and a roof edge or open end of an equipment platform is less than 6 feet. 2) The open end of the equipment platform is located more than 20" above the roof, floor or grade below. Exception: Guards shall not be required where a permanent fall arrest anchorage connector system in accordance with ASSE Z359.1 is installed.	☐ ☒
☒ ☐	Table 603.2, 603.3.10, 603.3.11, 603.3.12 N	Backflow Prevention Devices, Assemblies and Methods Table 603.2 was revised to reference the added code sections: Dual Check Backflow Preventer, Laboratory Faucet Backflow Preventers, Backflow Preventer with Intermediate Atmospheric Vent code sections were added to section 603.3 for backflow prevention assemblies, and methods.	☐ ☒
☒ ☐	603.5.10	Steam or Hot water Boilers section added: "backflow preventer with intermediate atmospheric vent and pressure reducing valve" as a method of protection from backflow.	☐ ☒
☒ ☐	606.9, 606.10	Added to 606 Valves: Check Valve Required. All systems that circulate water by means of a pump or other mechanical device or method shall have a check valve(s) or equal device(s) installed so as to ensure the direction of flow. Leak Detection Devices. Where leak detection device for water supply and distribution are installed, they shall comply with IAPMO IGC 115 or IAPMO IGC 349	☐ ☒
☒ ☐	608.2	Added: "Pressure regulators for potable water distribution systems shall comply with ASSE 1003"	☐ ☒
☒ ☐	608.3	Added standard for Pre-pressurized water expansion tanks which shall comply with IAPMO Z1088	☐ ☒
☐ ☒	608.5.(1)	Temperature relief valve / pressure relief valve discharge piping section revised. 608.5(1), the size of the valve outlet was changed from "Equal to" to "Not less than."	☐ ☒
☒ ☐	608.5.(8)	Added item 8, "The discharge termination point shall be readily observable."	☐ ☒

SIGNIFICANT CHANGES (cont'd)

NEW - CHANGE		CPC SECTION/TABLE NUMBER	COMMENTARY	MASTER PLAN IMPACT YES - NO	
☐	☒	609.8, 609.8.1, 609.8.2	Pumps code section added. Pumps shall be installed in accordance with the manufacturer's installation instructions. Access. Pumps shall be accessible for repairs. Potable Water Pumps. Pumps intended to supply drinking water shall be in accordance with NSF 61.	☐	☒
☒	☐	611.0, 611.1, 611.1.1, 611.1.2, 611.2	Drinking water Treatment Units section added. Drinking water treatment units shall comply with the applicable referenced standards in Table 611.1. Alkaline Water Treatment, Scale Reduction Devices and Air Gap Discharge code sections added to 611.1 for Drinking water treatment units	☐	☒
☒	☐	612.0, 612.1	Fire Sprinklers. Installation. Residential Sprinkler Systems shall be installed in compliance with the California Residential Code or the California Fire Code.	☒	☐
☒	☐	Table 701.2	ASME A112.4.4 added to table 701.2 Materials for Drain, Waste, Vent Pipe and Fittings.	☐	☒
☒	☐	Table 702.1(9)	New Footnote 9 added to Table 702.1. Footnote 9: For a bathtub to shower retrofit, a 1-1/2" trap and trap arm shall be permitted with a maximum shower size of 36" in width and 60" in length.	☒	☐
☒	☐	Table 703.2 Note 4	Table 703.2, Note 4: changed from three (2019 code) to maximum five water closets or six unit traps on a horizontal branch or drain. Changed from four (2019 code) to a maximum five water closets or six unit traps on vertical pipe or stack.	☐	☒
☐	☒	704.3	Commercial Sinks code revised. Added: A floor drain shall be provided adjacent to the fixture and shall be connected on the sewer side of the sink. No other drainage line shall be connected between the floor drain waste connection and the fixture drain.	☐	☒
☒	☐	Table 707.2	Table 707.2 was added to include a list of approved standards for cleanouts	☐	☒
☐	☒	911.1	Circuit Vent Permitted code section language revised for clarity and reference to Table 1002.2 was added.	☐	☒
☒	☐	911.1 Exception	Exception added to 911.1. Back-outlet and wall-hung water closets shall be permitted to be circuit vented provided that no floor-outlet fixtures are connected to the same horizontal branch.	☐	☒
☐	☒	911.2	Circuit Vent Size and Connection code section was revised to add a reference to Table 703.2 according to the number of circuit vented fixtures connected to the horizontal branch. Also "between the two most upstream trap arms" was added for vent connection location on the horizontal branch.	☐	☒
☒	☐	911.2.1	Added section on Multiple Circuit Vents. When multiple circuit vents are interconnected according to Section 911.4.1, each individual circuit vent shall be sized according to Section 911.2. The vent pipe connecting each circuit vent shall be sized according to Table 703.2.	☐	☒

SIGNIFICANT CHANGES (cont'd)

NEW - CHANGE	CPC SECTION/TABLE NUMBER	COMMENTARY	MASTER PLAN IMPACT YES - NO
☐ ☒	911.3.2	Fixture Drain relief vent now is permitted to 'serve as' a fixture drain. Added to code section: Fixtures discharging to a relief vent shall be one or two fixture unit fixtures but shall not exceed a total of 4 fixture units.	☒ ☐
☐ ☒	911.4	Slope and Size of horizontal Branch replaces "Relief Vent" from 2019 code. New language added: The slope of the vented section of the horizontal branch shall be uniformly sloped and not more than 1 inch per foot. The entire length of the vented section of the horizontal branch shall be sized for the total drainage discharge to the branch according to Table 703.2	☐ ☒
☐ ☒	911.4.1	Multiple Circuit-Vented Branches replaces "Connection and Installation" code section from 2019 code. Circuit vented horizontal braches are permitted to be connected together. Each group of a maximum of eight fixtures shall be considered a separate circuit vent and shall be in accordance with Section 911.4.1.1 and Section 911.4.1.2."	☐ ☒
☒ ☐	911.4.1.1	Size of Parallel horizontal Branches section added. Parallel horizontal circuit vented branches shall be permitted to connect on the same floor level. Each separate circuit-vented horizontal branch that is interconnected shall be sized independently in accordance with Section 911.	☐ ☒
☒ ☐	911.4.1.2	Size of Continuous horizontal Branches section added. Two or more circuit vented systems continuous on the same horizontal branch shall be uniformly sized for the total discharge into the branch.	☐ ☒
☒ ☐	1014.1	Grease Interceptors section has language added to regarding grease laden waste locations. Language added specifies locations: "….located in areas of establishments where food is prepared. Grease laden waste fixtures shall include sinks, drains and other fixtures or equipment serving establishments such as restaurants, cafes, lunch counters, cafeterias, bars and clubs, hotels, hospitals, sanitariums, factory or school kitchens…"	☐ ☒
☒ ☐	1208.10, 1208.10.1, 1208.10.2, 1208.10.3, 1208.10.4, 1208.10.5, 1208.10.6, 1208.10.7	Overpressure Protection Devices code sections were added. These include 1208.10 Overpressure Protection Devices, 1208.10.1 Separate Devices, 12087.10.2 Construction and Installation, 1208.10.3 External Control Piping, 1208.10.4 Setting, 1208.10.5 Unauthorized Operation, 1208.10.6 Discharge of Vents, 1208.10.7 Size of fittings, Pipe and Openings.	☐ ☒
☒ ☐	1211.3	Arc-Resistant Jacketed CSST code section was added requiring CSST listed with an arc resistant jacket or coating shall be bonded to an effective found fault path.	☐ ☒
☒ ☐	1212.1(5)	CSST shall connect only to appliance that are fixed in place.	☒ ☐

SIGNIFICANT CHANGES (cont'd)

NEW	CHANGE	CPC SECTION/TABLE NUMBER	COMMENTARY	MASTER PLAN IMPACT YES	NO
☒	☐	1215.2, 1215.2.1, 1215.2.2	Code sections added referencing sizing of piping systems have been moved as referenced in these code sections 1215.2 for sizing of gas piping systems, 1215.2.1 for natural gas piping systems and 1215.2.2 for Propane piping systems.	☐	☒
☐	☒	1304.1.1 [OSHPD 1, 1R, 2, 3, 4 & 5]	Added a reference to the California Fire Code Chapter 80.	☐	☒
☒	☐	1304.1.2 [OSHPD 1, 1R, 2, 3, 4 & 5]	New exception that a medical gas source system serving only an OSHPD 1R or 3 building may be located within it.	☐	☒
☒	☐	Table 1701.1	Table 1701.1 added two new standards "49 CFR 192.281" for plastic pipe and "49 CFR 192.283" for plastic pipe qualifying joining procedures.	☐	☒
☒	☐	Table 1701.1	Added ANSI/AAMI reference standard for water treatment equipment for hemodialysis applications	☐	☒