

County of Napa Building Division

2019 CALIFORNIA CODES



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"The Heart of the Napa Valley"



CALIFORNIA ELECTRICAL CODE SIGNIFICANT CHANGES

EFFECTIVE JANUARY 1, 2020

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Tamper-Resistant Receptacles 406.12. Requirements for tamper-resistant receptacles were expanded to mobile homes, preschools and elementary education facilities, as well as other locations where small children are likely to congregate. Tamper-resistant receptacles were expanded to 250-volt receptacles as well as 125-volt.

Flexible Cords 422.16(B)(2). Maximum length of flexible cord for built-in dishwashers increased from 4 feet to 6½ feet.

Installation of Cables Under Floor Coverings 424.45. New requirements were added for the installation of heating cables installed under floor coverings.

Grounding and Bonding (Air Conditioning and Refrigerating Equipment) 440.9. A new requirement was added requiring a wire-type equipment grounding conductor for non-threaded conduit systems on rooftops supplying such things as HVAC equipment.

Underground Wiring (Motor Fuel Dispensing Facilities) 514.8. No. 2. The HDPE conduit was added as an acceptable underground wiring methods for motor fuel-dispensing facilities.

Grounding (RV Parks) 551.75(B). Grounding at RV Park pedestals (equipment): Grounding electrode systems are not required to be established at RV pedestals (equipment) that are not considered a service.

Signs with a Retrofitted Illumination System 600.4(B). New requirement calls for electric signs that have been retrofitted to be marked to indicate that it is a retrofit kit.

Wireless Power Transfer Equipment (Electric Vehicle Charging System) Article 625, Part IV. New part entitled "Wireless Power Transfer Equipment" was added to Article 625.

Grounding and Bonding Terminals (Swimming Pools, Fountains, and Similar Installations) 680.7. New requirements for grounding and bonding terminals to be identified for use in wet and corrosive environments were added. The new text adds specific requirements to address these conditions.

Pool Pump Motor Receptacle 680.22(A)(2). Requirements for the pool pump motor receptacle were revised with the single receptacle requirement removed and the minimum distance from the pool of 10 feet being reduced to 6 feet.

Identification of Power Sources (PV) 690.52(C). Provisions for identifying a PV "Rapid Shutdown System" have been extensively revised. Two new figures with illustrated labels have been added to indicate to first responders that rapid shutdown is provided.

Large-Scale Photovoltaic (PV) Electric Power Production Facility Article 691. New article for "Large-Scale Photovoltaic (PV) Electric Power Production Facility" was added.

Energy Storage Systems Article 706. The new article, "Energy Storage Systems," applies to all permanently-installed energy storage systems (ESS) operating at over 50 volts ac or 60 volts dc that may be stand-alone or interactive with other electric power production sources.

If you have any questions or would like more information regarding the new and updated material, contact the Building Division at (707) 253-4417 or visit us at www.countyofnapa.org

2019 California Electrical Code Analysis of Changes

Arc-Flash Hazard Warning, Service Equipment 110.16(B). Non-dwelling unit service equipment rated 1,200 amperes or more is required to be labeled with the normal system voltage, available fault current, clearing times, and date the label was applied.

Marking, Reconditioning Equipment 110.21 (A)(2). New requirements were added to require refurbished, reconditioned, or remanufactured equipment to be marked with the name, trademark, or other descriptive marking by which the organization responsible for reconditioning the electrical equipment can be identified. The date of the reconditioning must also be established on the nameplate or marking.

Ground Fault Circuit Interrupter (GFCI) 210.8(B). The GFCI requirements for receptacles at commercial/industrial applications have been expanded to recognize ground faults other than 15 and 20A 125-volt applications only.

Ground Fault Circuit Interrupter (GFCI) 210.8(B)(9). GFCI protection for receptacles in non-dwelling unit crawl spaces has been added.

Ground Fault Circuit Interrupter (GFCI) 210.8(B)(10). GFCI protection has been added for receptacles installed in non-dwelling unit unfinished basements/crawl spaces at or below grade level.

Ground Fault Circuit Interrupter (GFCI) 210.8(E). GFCI protection for lighting outlets not exceeding 120 volts in crawl spaces has been added.

Garage Branch Circuits 210.11(c)(4). The branch circuit supplying branch outlets in dwelling unit garages is now required to be a 120-volt, 20-ampere rated branch circuit. The garage receptacle outlet branch circuit is still prohibited from serving other outlets with the exception of readily-accessible receptacles located outdoors.

Arc-Fault Circuit-Interrupter Protection 210.12(c). New provisions added requiring AFCI protection for guest rooms/guest suites of hotels/motels.

Dwelling Unit Receptacle Outlets 210.52(A)(2)(1). Fixed cabinets “that do not have countertops or similar work surfaces” was added as an item that will constitute a break in wall space for receptacle spacing requirements at dwelling units.

Dwelling Unit Garages 210.52(G)(1). At least one receptacle outlet is required to be installed “in each vehicle bay” and not more than 5½ feet above the floor in dwelling unit garages.

Receptacle Outlets in Meeting Rooms 210.71. Receptacle outlet requirements were added for non-dwelling unit meeting rooms such as those found at hotel and convention centers.

Number of Supplies (outside branch circuits and feeders) 225.30(F). Multiple feeders are now allowed to enter a one- or two-family dwelling unit under certain restrictions, which include that the feeder disconnects at the building served must be grouped.

Supports over Buildings 230.29. New requirement added for bonding of metal overhead service support structures over buildings.

Grounding Electrodes 250.52(B)(3). In-ground swimming pool structures are not permitted to be used as a grounding electrode.

Underground Installations 300.5. Two new footnotes were added to Table 300.5. These notes address a reduction of burial depth of 6 inches for pool, spa, and fountain lighting that is limited to not more than 30 volts. The installation is required to be within a nonmetallic raceway and part of a listed low-voltage lighting system.

Number of Conductors in Outlet, Devices, and Junction Boxes, and Conduit Bodies 314.16(A) and (B). New text was added to accommodate boxes with internal barriers for box volume and box fill calculations.

Receptacle Rating and Type 406.3(E). The word “Controlled” is now required to be placed on the controlled receptacle along with the previous symbol. The controlled receptacle symbol and the word “Controlled” are to be placed on the controlled receptacle face (not the faceplate or cover) and visible after installation.

General Installation Requirements 406.4(D)(4). Two new exceptions were added for AFCI requirements for replacing existing receptacles. The first new exception recognizes applications where an existing two-wire receptacle is replaced and no equipment grounding conductor can be installed. The second new exception to 210.12(B) does not apply when replacing existing receptacles.