CITY OF HUNTINGTON BEACH

COMMUNITY DEVELOPMENT DEPARTMENT

BUILDING DIVISION

2000 Main Street
Huntington Beach, CA 92648
(714) 536-5241

2019 CALIFORNIA ELECTRICAL CODE - SIGNIFICANT CHANGES

2019 CALIFORNIA ELECTRICAL CODE SIGNIFICANT CHANGE SUMMARY

The following changes are not inclusive of all code changes. Please refer to the *2019 California Electrical Code* for all changes.

PART 3

SECTION	***NOTES***
210.8(B)	**Other Than Dwelling Units** – All single-phase receptacles rated 150V to ground or less, 50 amperes or less and three-phase receptacles rated 150 volts to ground or less, 100 amperes or less installed in the following locations shall have ground-fault circuit-interrupter protection for personnel. 1) Bathrooms 2) Kitchens 3) Rooftops (see exception) 4) Outdoors (see exceptions) 5) Sinks (see exceptions) 6) Indoor wet locations 7) Locker rooms with associated showering facilities 8) Garages, service bays, and similar areas other than vehicle exhibition halls and showrooms 9) Crawl spaces – at or below grade level 10) Unfinished portions or areas of the basement not intended as habitable rooms
210.8(E)	**Crawl Space Lighting Outlets** – GFCI protection shall be provided for lighting outlets not exceeding 120 volts installed in crawl spaces.
210.12(C)	**Guest Room and Guest Suites** – All 120 volt, single-phase, 15- and 20-ampere branch circuits supplying outlets and devices installed in guest rooms and guest suites of hotels and motels shall be protected by any of the means described in 210.12(A)(1) through (6).
210.64	**Electric Service Areas** – At least one 125-volt, single-phase, 15- or 20-ampere-rated receptacle outlet shall be installed in an accessible location within 25 ft of the indoor electrical service equipment. The required receptacle outlet shall be located within the same room or area as the service equipment. **Exception No. 1:** The receptacle outlet shall not be required to be installed in one-and two-family dwellings.

	Exception No. 2: Where the service voltage is greater than 120 volts to ground, a receptacle outlet shall not be required for services dedicated to equipment covered in Article 675 and 682.
210.71	**Meeting Rooms** (A) General - Each meeting room of not more than 1000 sq ft in other than dwelling units shall have outlets for non-locking-type, 125-volt, 15- or 20-ampere receptacles. The outlets shall be installed in accordance with 210.71(B). Where a room or space is provided with movable partition(s), each room size shall be determined with the partition in the position that results in the smallest size meeting room. (B) Receptacle Outlets Required – The total number of receptacle outlets, including floor outlets and receptacle outlets in fixed furniture, shall not be less than as determined in (1) and (2). These receptacle outlets shall be permitted to be located as determined by the designer or building owner. (1) Receptacle Outlets in Fixed Walls – Receptacle outlets shall be installed in accordance with 210.52(A)(1) through (A)(4). (2) Floor Receptacle Outlets – A meeting room that is at least 12 ft wide and that has a floor area of at least 215 sq ft shall have at least one receptacle outlet located in the floor at a distance not less than 6 ft from any fixed wall for each 215 sq ft or major portion of floor space.
240.67	**Arc Energy Reduction** – Where fuses rated 1200 A or higher are installed, 240.67(A) and (B) shall apply (A) (A) Documentation – Documentation shall be made available to those authorized to design, install, operate, or inspect the installation as to the location of the fuses. (B) (B) Method to Reduce Clearing Time – A fuse shall have a clearing time of 0.07 seconds or less at the available arcing current, or one of the following shall be provided (1) differential relaying (2) energy-reducing maintenance switching with local status indicator (3) energy-reducing active arc flash mitigation system (4) an approved equivalent means
250.30(A)(4)	**Grounding Electrode** – The building or structure grounding-electrode system shall be used as the grounding electrode for the separately derived system. If located outdoors, the grounding electrode shall be in accordance with 250.30(C)
310.15(B)(3)(c)	**Raceways and Cables Exposed to Sunlight on Rooftops** – Where raceways or cables are exposed to direct sunlight on or above rooftops, raceways or cables shall be installed a minimum distance above the roof to the bottom of the raceway or cable of 7/8". Where the distance above the roof to the bottom of the raceway is less than 7/8", a temperature adder of 33 degrees C (60 degrees F) shall be added to the outdoor temperature for application of the correction factors in Table 310.15(B)(2)(a) or Table 310.15(B)(2)(b).
336.10(9)	In one- and two-family dwelling units, Type TC-ER cable containing both power and control conductors that is identified for pulling through structural members shall be permitted. Type TC-ER cable used as interior wiring shall be installed per the requirements of Part II of Article 334.

406.12	**Tamper Resistant Receptacles** – All 15- and 20-ampere, 125- and 250-volt non-locking-type receptacles in the areas specified in 406.12(1) through (7) shall be listed tamper resistant receptacles. (1) dwelling units in all areas specified in 210.52 and 550.13 (2) guest rooms and guest suites of hotels and motels (3) child care facilities (4) preschools and elementary education facilities (5) business offices, corridors, waiting rooms and the like in clinics, medical and dental offices and outpatient facilities (6) subset of assembly occupancies described in 518.2 to include places of waiting transportation, gymnasiums, skating rinks, and auditoriums (7) dormitories
680.14	**Corrosive Environment** – (A) **General**. Areas where pool sanitation chemicals are stored, as well as areas with circulation pumps, automatic chlorinators, filters, open areas under decks adjacent to or abutting the pool structure, and similar locations shall be considered to be a corrosive environment. The air in such areas shall be considered to be laden with acid, chlorine, and bromine vapors, or any combination of acid, chlorine, or bromine vapors. (B) **Wiring Method**. Wiring methods in the areas described in 680.14(A) shall be listed and identified for use in such areas. Rigid metal conduit, intermediate metal conduit, rigid polyvinyl chloride conduit, and reinforced thermosetting resin conduit shall be considered to be resistant to the corrosive environment specified in 689.14(A).
680.25(A)	**Feeders** - where feeders are installed in corrosive environments as described in 680.14, the wiring method of that portion of the feeder shall be as required in 680.14(B) or shall be liquid-tight flexible nonmetallic conduit. Wiring methods installed in corrosive environments as described in 680.14 shall contain an insulated copper equipment grounding conductor sized in accordance with Table 250.122, but not smaller than 12 AWG.
690.47	**Grounding Electrode System** – a building or structure supporting a PV array shall have a grounding electrode system installed in accordance with Part III of Article 250. PV array equipment grounding conductors shall be connected to the grounding electrode system of the building or structure supporting the PV array in accordance with Part VII of Article 250. This connection shall be in addition to any other equipment grounding conductor requirements in 690.43(C). The PV array equipment grounding conductors shall be sized in accordance with 690.45.
690.53	**Direct-Current Photovoltaic Power Source** – a permanent label for the dc PV power source indicating the information specified in (1) through (3) shall be provided by the installer at dc PV disconnecting means and at each dc equipment disconnecting means required by 690.15. Where a disconnecting means has more than one dc PV power source, the values in 690.53(1) through (3) shall be specified for each source. (1) maximum voltage (2) maximum circuit current (3) maximum rated output current of the charge controller or dc-to-dc converter (if installed)

695.15	**Surge Protection** – a listed surge protection device shall be installed in or on the fire pump controller.
Article 691	**New Code Section:** Large Scale Photovoltaic (PV) Electric Power Production Facility (min. 5,000kw)
Article 706	**New Code Section:** Energy Storage Systems
Article 710	**New Code Section:** Stand Alone Systems
Article 712	**New Code Section:** Direct Current Microgrids (DC Microgrids)