

Date: January 1, 2011

**Significant Changes in the 2010 California Electrical Code
(based upon the 2008 National Electrical Code)**

The following list of changes is not inclusive, but does include those felt to have the most impact on electrical installations. Please refer to the particular article for the complete text. These requirements will become effective in the City of Pleasanton on January 1, 2011.

Section	Description
Article 100	New definitions for bonding, grounding, kitchen, neutral, etc.
110.20	Table 430.91, covering enclosure types, has been moved to Table 110.20.
110.22	Equipment containing circuit breakers or fuses applied in engineered series combination ratings in accordance with 240.86(A) shall be field marked.
110.26(C)(2)	Equipment size and rating determine when necessary for two entrances.
110.26(C)(3)	Access doors within 25 feet of equipment rated 1200 amp or more must open outward with simple pressure (panic bars, push plates, etc.).
210.4(B)	Each multiwire branch circuit shall be provided with a means that will simultaneously disconnect all ungrounded conductors at the point where the branch circuit originates.
210.4(D)	Multiwire branch circuits must be grouped together with their associated grounded (neutral) conductor at the branch circuit panelboard (unless the grouping is obvious).
210.8(A)	The exceptions to GFCI protection in dwelling unit garages and unfinished basements (for appliances within dedicated spaces or receptacles not readily accessible) have been eliminated.
210.8(B)	All outdoor receptacles in other than dwelling units must be GFCI protected.
210.12(B)	All receptacles in the habitable portion of a dwelling unit except kitchens, laundry rooms and baths, shall be protected by a combination-type AFCI.
210.52	Wall switched controlled receptacles do not count as the receptacle outlets required by 210.52.
210.52(E)	A receptacle outlet is required on dwelling unit balconies, decks and porches.
240.24(F)	Overcurrent devices are not allowed to be located above stairways.
250.32(B)	Equipment grounding conductors are required to be installed with all branch circuits and feeders supplying separate buildings or structures.
250.146	Clarifies the rules for connection of equipment grounding conductor between receptacles and metal boxes.
300.4(E)	Cables and raceways require protection where installed less than 1.5 inches below metal roof decking.
300.5(B)	The interior of enclosures and raceways installed underground are considered wet locations.
300.5(C)	Underground cables installed under buildings shall be in a raceway.

- 300.9 Conductors and cables installed in above grade raceways in wet locations shall be suitable for wet locations.
- 310.15(B)(2)(c) Raceways and cables installed on rooftops exposed to direct sunlight are subject to correction factors in Table 310.15(B)(2)(c).
- 314.16(B)(4) Large devices (wider than 2") require double conductor volume allowances.
- 314.30(C) Conductors and splices in handhole enclosures are required to be listed for wet locations.
- 334.12(B)(4) NM cable is not permitted in damp or wet locations.
- 334.15(C) NM cable installed in crawl spaces now require the same protection as that installed in unfinished basements (running boards, through drilled holes, etc).
- 334.80 If more than two NM cables are installed in bored holes through wood framing that requires draft or fire stopping, or in contact with thermal insulation without maintaining spacing between cables, their ampacity must be adjusted.
- 352.10(G) The new foam core PVC is allowed in underground or concrete encased installations only.
- 353.48 Type HDPE conduit shall be joined together with approved fittings. PVC glue is not permitted.
- 406.8 Receptacles installed in damp or wet locations shall be listed as weather resistant.
- 406.11 125 volt, 15 and 20 ampere receptacles required in 210.52 are to be tamper-resistant.
- 408.3(F) Switchboards and panelboards containing high-leg systems are required to be permanently field marked.
- 408.36, 408.54 The general limit of 42 overcurrent devices in a panelboard has been relaxed.
- 410.6 All luminaires and lampholders are required to be listed.
- 410.16 Surface-mounted fluorescent or LED luminaires that have been identified as suitable for installation within a storage area.
- 422.52 Electric drinking water fountains must be GFCI protected.
- 680.22 Several of the 5-foot and 10-foot dimensions for receptacle distance from pools and hot tubs have been changed to 6-foot.
- 680.22(B) Cord connected and hard wired pool pumps must be GFCI protected.
- 680.26 The requirements for the equipotential bonding of pools have been rewritten.
- 680.26(C) Pool water is required to be bonded to the equipotential grid.
- 680.71 A hydromassage bathtub must be supplied by an individual branch circuit.
- 690.31(F) Flexible, fine-stranded cables shall be terminated only with terminals, lugs or connectors that are identified and listed for such use.
- Annex H Not adopted by the City of Pleasanton.

These requirements will become effective for all construction permitted in the City of Pleasanton after January 1, 2011.