



*A NEMA Wireless Devices Section White Paper  
WD ARCP 1-2016*

**Automatic Receptacle Control to Meet  
ASHRAE 90.1-2010 and California Title 24**

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- b) an occupant sensor that shall turn receptacles off within 20 minutes of all occupants leaving a space; or
- c) an automated signal from another control or alarm system that shall turn receptacles off within 20 minutes after determining that the area is unoccupied.

All controlled receptacles shall be permanently marked to visually differentiate them from uncontrolled receptacles and are to be uniformly distributed throughout the space.

Plug-in devices shall not be used to comply with section 8.4.2.

**Exceptions:** Receptacles for the following shall not require an automatic control device:

- a) Receptacles specifically designated for equipment requiring continuous operation (24 hours/day, 365 days/year)
- b) Spaces where an automatic control would endanger the safety or security of the room or building occupant(s)

### California Electric Code (CEC) Title 24 Section 130.5

#### (d) Circuit Controls for 120-Volt Receptacles.

In all buildings, office, open office, open office. Additionally, the following requirements

1. Electric control
2. At least one controlled receptacle or a split-wired duplex receptacle with one controlled and one uncontrolled receptacle shall be installed; and
3. Controlled receptacles shall have a permanent marking to differentiate them from uncontrolled receptacles; and
4. For open office areas, controlled circuits shall be provided and marked to support installation and configuration of office furniture with receptacles that comply with Section 130.5(d) 1, 2, and 3; and
5. For hotel and motel guest rooms at least one-half of the 120-volt receptacles in each guest room shall be controlled receptacles that comply with Section 130.5(d)1, 2, and 3. Electric circuits serving controlled receptacles shall have captive card key controls, occupancy sensing controls, or automatic controls such that, no longer than 30 minutes after the guest room has been vacated, power is switched off.
6. Plug-in strips and other plug-in devices that incorporate an occupant sensor shall not be used to comply with this requirement.

**EXCEPTION 1 to Section 130.5(d):** In open office areas, controlled circuit receptacles are not required if, at time of final permit, workstations are installed, and each workstation is equipped with an occupant sensing control that is permanently mounted in each workstation, and which controls a hardwired, nonresidential-rated power strip. Plug-in strips and other plug-in devices that incorporate an occupant sensor shall not be used for this exception.

**EXCEPTION 2 to Section 130.5(d):** Receptacles that are only for the following purposes:



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each private  
and copy room.  
all meet the

put-OFF  
nd

controlled  
receptacle

- i. Receptacles specifically for refrigerators and water dispensers in kitchenettes.
- ii. Receptacles located a minimum of six feet above the floor that are specifically for clocks.
- iii. Receptacles for network copiers, fax machines, A/V and data equipment other than personal computers in copy rooms.
- iv. Receptacles on circuits rated more than 20 amperes.

### National Electrical Code® Article 406

**(E) Controlled Receptacle Marking.** All nonlocking-type, 125-volt, 15- and 20-ampere receptacles that are controlled by an automatic control device, or that incorporate control features that remove power from the outlet for the purpose of energy management or building automation, shall be marked with the symbol shown in Figure 406.3(E) and located on the controlled receptacle outlet where visible after installation.



**Figure 406.3(E) Controlled Receptacle Marking Symbol.**

*Exception: The marking is not required for receptacles controlled by a wall switch that provide the required room lighting outlets as permitted by 210.70.*

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