

CE216-19

IECC: C405.10 (New)

Proponent: Marilyn Williams, representing National Electrical Manufacturers Association

2018 International Building Code

Add new text as follows:

C405.10 Automatic Receptacle Control The following shall be automatically controlled:

1. At least 50% of all 125 V, 15 and 20-amp receptacles installed in enclosed offices, conference rooms, rooms used primarily for copy or print functions, breakrooms, classrooms, and individual workstations, including those installed in modular partitions and module office workstation systems.
2. At least 25% of branch circuit feeders installed for modular furniture not shown on the construction documents.
3. Either split controlled receptacles shall be provided, with the top receptacle controlled, or a controlled receptacle shall be located within 12 inches of each uncontrolled receptacle.

This control shall function on:

1. A scheduled basis using a time-of-day operated control device that turns receptacle power off at specific programmed times and can be programmed separately for each day of the week. The control device shall be configured to provide an independent schedule for each portion of the building of not more than 5000 ft² and not more than one floor. The occupant shall be able to manually override an area for not more than two hours. Any individual override switch shall control the receptacles of not more than 5000 ft.
2. An occupant sensor control that shall turn receptacles off within 20 minutes of all occupants leaving a space; or
3. 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 in accordance with NFPA 70 and be uniformly distributed throughout the space. Plug-in devices shall not comply.

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

1. Receptacles specifically designated for equipment requiring continuous operation (24/day, 365 days/year).
2. Spaces where an automatic control would endanger the safety or security of the room or building occupants.
3. Within a single modular office workstation, non-controlled receptacles are permitted to be located more than 12 inches, but not more than 72 inches from the controlled receptacles serving that workstation.

Reason: This proposal will:

1. Increase building energy efficiency
2. Offer a well-studied, cost effective efficiency measure

3. Maintain building occupant's safe usability
4. Keep enforceability simple
5. Align with other energy efficiency codes, increasing design compliance.

Cost Impact: The code change proposal will increase the cost of construction. Costs estimated to be \$0.26/ft² for small office implementation and \$0.19/ft² for large office. Payback estimated at 4.2 years for small office buildings (10,000sqft) and 2.4 years for large office buildings (100,000sqft). Source: 2013 California Building Energy Efficiency Standards CASE report.

Proposal # 4316

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