



CALIFORNIA ENERGY COMMISSION

2008 Standards Review of Lighting Changes Proposed by Staff

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Section 100 Scope

EXCEPTION 1 to Section 100 (a): Qualified historic buildings, as defined in the State Historic Building Code (Title 24, Part 8).

Proposed:

Continue working with State Historical Building Safety Board on possible changes to language in §100 and §146.





Section 101 Definitions

Proposed:

- **Clarifications**
- **Organization**
 - “Occupancy Type” to “Lighting – Residential Occupancy Type” and “Lighting – Nonresidential Occupancy Type”
- **Additions**
 - RESIDENTIAL: Closet, Garage, Laundry, Storage Building, Utility Room, Permanently Installed Luminaires
 - NONRESIDENTIAL: Salon, Videoconferencing
 - SIGNS: Neon





Section 119 Mandatory Requirements

Proposed:

- Lighting control devices may be unitary devices or systems consisting of two or more components.
- **Add:**
 - Manual-On Occupant Sensor (Residential)
 - Dimmers
 - Track Lighting Integral Current Limiter
- **Move:**
 - Installation in Accordance with Manufacturer's Instructions.





Section 130 – Lighting Controls & Equipment

Proposed:

(c) Luminaire power

- Clarifications
- Include language from 2005 Nonresidential Manual
- Add new language





Section 131 – Indoor Lighting Controls

Proposed:

- Clarify Area Controls, Multi-Level Controls, Daylight Controls, Shutoff Controls
- Consider exempting parking garages and stairs from shutoff controls
- Change exception 0.5 to 0.33 W/sf for egress
- Floor, wall, window, and case display lighting shall each be separately controlled
- Add acceptance requirements for outdoor lighting controls





Section 132 – Outdoor Lighting Controls

(b) Luminaire Cutoff Requirements

Proposed:

Add to exceptions

- Commercial trucking distribution terminals.
- Replacement of existing outdoor pole mounted luminaires in hardscape areas meeting all of the following conditions: where the spacing between existing poles is greater than six times the mounting height of the existing luminaires, where no additional poles are being added to the site, and provided that the connected lighting load is reduced.





Section 132 – Outdoor Lighting Controls

(c) Controls for Outdoor Lighting

Proposed:

- Move all reference to garages from outdoor lighting controls section to indoor lighting controls section





Section 146 – Prescriptive Requirements for Indoor Lighting

- **Proposed:**
- **Clarifications Include**
 - Remove redundancy
 - Occupant Sensor PAF
 - Lighting Wattage Excluded – applies only to Section 146, theatrical lighting for religious worship, ATM in parking garages, medical is in addition to general lighting
 - Additional Lighting Power Allowance in Table 146-C (move from note to include inside table)
- **Additions Include**
 - Manual dimming with automatic load control of dimmable electronic ballasts add “with a minimum Ballast Efficacy Factor (BEF) ≥ 1.48 ”
 - Videoconference & Salon Types of Use





Section 146 – Prescriptive Requirements for Indoor Lighting

Proposed:

3. Multiple interlocked lighting systems serving a space.

- Consider deleting because today's smart controls are readily reprogrammable after interlocked lighting system has been inspected by Building Department





Section 147 –Requirements for Outdoor Lighting

Proposed:

ADD

EXCEPTIONS to Section 147:

- Outdoor lighting in theme parks
- Outdoor theatrical and other outdoor live performances
- Outdoor lighting systems in qualified historic properties





Section 149 – Additions, Alterations, and Repairs to Existing Buildings

Proposed:

Clarify

- Add specificity to lighting alterations.





Questions ?

