

Application	Mandatory Requirements					Prescriptive Requirements	
	Outdoor Incandescent Lighting §130.2(a) ^E	Luminaire Cutoff Requirements §130.2(b)	Lighting Controls ^G §130.2(c)	Sign Lighting Controls §130.3(a)	Lighting Control Acceptance and Installation Certificate Requirements §130.4 ^M	Outdoor Lighting Power Trade-off §140.7(b)	Additional Lighting Power Allowance §140.7(d)2
Alterations That Increase Connected Lighting Load	YES	YES	YES	no	YES	YES	YES
Alterations That Replace ≥ 10%	YES^F	YES	YES^H	no	YES	no	no
Alterations That Replace ≥ 50%	YES^F	YES	YES^I	no	YES	YES	YES^N
Outdoor Incandescent Lighting Rated > 100 Watts	YES^F	no	YES^J	no	YES	no	no
All Outdoor Lighting Rated > 150 Watts ^A	no	YES	YES^J	no	YES	no	no
Lighting for Outdoor Sales Frontage ^B	no	no	YES	no	YES	no	YES
Lighting for Building Facades, Ornamental Hardscape and Outdoor Dining ^C	no	no	YES	no	YES	no	YES
General Hardscape Lighting ^D	no	no	YES	no	YES	YES	no
Outdoor Sign Lighting	no	no	YES^K	YES^L	YES	no	no
Electronic Message Centers	no	no	no	YES^L	YES	no	no

A Except signs, lighting for building façade, public monuments, statues, vertical surfaces of bridges, temporary outdoor lighting, lighting for public right of way on roadways, sidewalks and bikeways, replacement for existing non-applicable pole-mounted luminaires and those not permitted by health of life safety statute, ordinance or regulation.

B Automatic part-night lighting control or motion sensor with auto-on functionality and capable of reducing lighting power by 40% but not exceeding 90%.

C Automatic part-night lighting control or motion sensor with auto-on functionality or centralized time-based zone lighting control.

D General hardscape lighting determined according to §140.7(d)1 may be traded to specific applications in §140.7(d)2.

E Motion sensors must be able to automatically reduce power by at least 40% but not more than 90%.

F If the luminaires installed are ≥100 Watts.

G Only applicable if mounted ≤24 feet from the ground.

H Alterations that do not increase lighting load and replace four or fewer luminaires or less than 10% of existing luminaires are exempt from the requirements of §130.2(c).

I Alterations that do not increase lighting load and replace four or fewer luminaires, or less than 50% of existing luminaires are exempt from the requirements of §130.2(c).

J Except lighting for outdoor sales frontage, outdoor sales lots and outdoor sales canopies and lighting for building facades, ornamental hardscape and outdoor dining. Also exempted are pole lighting that meet exceptions in §130.2(c)3. Applies to all exterior lighting mounted at least 24 feet above the ground. Outdoor lighting controlled by a photo-control or outdoor astronomical time-switch. No more than 1500W of lighting power should be controlled together.

K Except outdoor signs in tunnels and signs that are lit continuously 24 hours per day year round.

L Exceptions exist for EMCS that have a new connected lighting power load less than 15 kW, or cannot be reduced due to health or life safety statutes, ordinances, or regulations.

M Acceptance testing requirements are not required for alterations where controls are added to < 20 luminaires.

N Alterations where the replacement luminaires have ≥ 40% lower power consumption than existing luminaires are exempt from lighting power allowances in §140.7(d).

Additional Notes:

1. Allowed lighting power is calculated:
 - a. For outdoor lighting as per §140.7(d).
 - b. For outdoor sign lighting, maximum lighting power \leq product of illuminated sign area and 2.3W per ft².
2. Light sources for sign lighting are listed in §140.8(b).
3. Mandatory Requirements for Outdoor Lighting Control:
 - a. Lighting control devices are regulated by Appliance Standards, Title 20.
 - b. Lighting control systems are regulated by Title 24, Part 6 and must comply with §110.9(b).
 - c. All lighting control systems require an Installation Certificate.
4. Outdoor lighting controlled by a photo-control or outdoor astronomical time-switch. No more than 1500W of lighting power should be controlled together.
5. All fixtures must comply with Title 24, Part 11 (CALGreen) for applicable BUG (Backlight, Uplight, Glare) requirements.
6. Certificate of Compliance, Certificate of Installation and Certificate of Acceptance all need to be completed for any outdoor or sign lighting project.

For More Information

Primary Sources

- Energy Standards Section 130.2, Outdoor Lighting Controls and Equipment:
EnergyCodeAce.com/site/custom/public/reference-ace-2016/Documentsna93section1302outdoorlightingcontrolsandequipment.htm
- Energy Standards Section 130.3, Sign Lighting Controls:
EnergyCodeAce.com/site/custom/public/reference-ace-2016/Documentsna94section1303signlightingcontrols.htm
- Energy Standards Section 140.7, Requirements for Outdoor Lighting:
EnergyCodeAce.com/site/custom/public/reference-ace-2016/Documents/na115section1407requirementsforoutdoorlighting.htm
- Energy Standards Nonresidential Compliance Manual Chapter 6, Outdoor Lighting:
energy.ca.gov/2015publications/CEC-400-2015-033/chapters/chapter_06_outdoor_lighting.pdf
- Energy Standards Nonresidential Compliance Manual Chapter 7, Sign Lighting:
energy.ca.gov/2015publications/CEC-400-2015-033/chapters/chapter_07_sign_lighting.pdf

California Energy Commission Information & Services

- Energy Standards Hotline: 1-800-772-3300 (Free) or Title24@energy.ca.gov
- Online Resource Center:
energy.ca.gov/title24/orc/
 - The Energy Commission’s main web portal for Energy Standards, including information, documents, and historical information

Additional Resources

- California Lighting Technology Center (CLTC) Guides: Nonresidential Lighting: What’s New in the 2016 Title 24, Part 6 Code?
cltc.ucdavis.edu/publication/2016-title-24-code-changes-nonresidential
- Energy Code Ace:
EnergyCodeAce.com
 - An online “one-stop-shop” providing free resources and training to help appliance and building industry professionals decode and comply with Title 24, Part 6 and Title 20. The site is administered by California’s investor-owned utilities.

Of special interest:

- Title 24 Part 6 Fact Sheets (EnergyCodeAce.com/content/resources-fact-sheets)
 - Nonresidential Lighting Mandatory Controls
 - Nonresidential Lighting Controls for Credit
- Title 20 Lighting FAQ Fact Sheet (EnergyCodeAce.com/content/title-20-resources)

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