

DOCKETED

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2019 Building Energy Efficiency Standards

SUBCHAPTER 6

Section 141.0

NONRESIDENTIAL, HIGH-RISE RESIDENTIAL, AND HOTEL/MOTEL OCCUPANCIES—ADDITIONS, ALTERATIONS, AND REPAIRS

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Pre-Rulemaking Workshop



§141.0(a) -Additions and §141.0(b) -Alterations

Non-substantive edits

- Substitute “thermostatic controls” for “thermostat”
- Exception 2 to §141.0(b)2Bi & ii is dependent on weight, not thermal mass



§141.0(b) – Alterations, Prescriptive

- Merging §141.0(b)2I, J and K to Simplify Altered Indoor Lighting Systems
- Update Table 141.0-E to be clearer and more readable
- Make small adjustments to Options 2 and 3 to simplify and streamline compliance



§141.0(b) – Alterations, Prescriptive

§141.0(b)2lii, Altered Indoor Lighting Systems (Option 2)

- Reduce LPD limit for Option 2 from 85% to 80% of full allowance
- Align Option 2 to require same controls as Option 3
- Limit Exception 2 to apply to spaces with one luminaire instead of two or fewer



§141.0(b) – Alterations, Prescriptive

§141.0(b)2liii, Altered Indoor Lighting Systems (Option 3)

- New limit of $\leq 5,000$ sqft.
- 40% uniform lighting power reduction applies for all occupancies instead of 35%/50% split reduction
- Limit Exception 2 to apply to spaces with one luminaire instead of two or fewer



§141.0(b)2I – Altered Indoor Lighting Systems, Prescriptive (Sample Language)

- I. **Altered Indoor Lighting Systems.** Alterations to indoor lighting systems that include 10% or more of the luminaires serving an enclosed space shall meet the requirements of i, ii, or iii below:
- i. The alteration shall comply with the indoor lighting power requirements specified in Section 140.6 and the lighting control requirements specified in Table 141.0-E;
 - ii. The alteration shall not exceed 80% of the indoor lighting power requirements specified in Section 140.6, and shall comply with the lighting control requirements specified in Table 141.0-E; or
 - iii. The alteration shall be a luminaire-for-luminaire alteration within a building or tenant space of 5,000 square feet or less, shall have at least 40% lower rated power compared to the system prior to the alteration, and shall comply with the lighting control requirements specified in Table 141.0-E.

Alterations to indoor lighting systems shall not prevent the operation of existing, unaltered controls, and shall not alter controls to remove functions specified in Section 130.1.

Alterations to indoor lighting systems are not required to separate existing general, floor, wall, display, or ornamental lighting on shared circuits or controls. New or completely replaced lighting circuits shall comply with the control separation requirements of Section 130.1(a)4 and 130.1(c)1D.



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Table 141.0-E – Control Requirements for Indoor Lighting System Alterations

Control Specifications		Projects complying with Section 141.0(b)2Ii	Projects complying with Section 141.0(b)2Iii	Projects complying with Section 141.0(b)2Iiii
Manual Area Controls	130.1(a)1	Required	Required	Required
	130.1(a)2	Required	Required	Required
	130.1(a)3	Only required for new or completely replaced circuits	Only required for new or completely replaced circuits	Only required for new or completely replaced circuits
Multi-Level Controls	130.1(b)	Required	Not Required	Not Required
Automatic Shut Off Controls	130.1(c)1	Required; 130.1(c)1D only required for new or completely replaced circuits	Required; 130.1(c)1D only required for new or completely replaced circuits	Required; 130.1(c)1D only required for new or completely replaced circuits
	130.1(c)2	Required	Required	Required
	130.1(c)3	Required	Required	Required
	130.1(c)4	Required	Required	Required
	130.1(c)5	Required	Required	Required
	130.1(c)6	Required	Required	Required
	130.1(c)7	Required	Required	Required
	130.1(c)8	Required	Required	Required
Daylighting Controls	130.1(d)	Required	Not Required	Not Required
Demand Responsive Controls	130.1(e)	Required	Not Required	Not Required



§141.1 – Additions or Alterations, Prescriptive

§141.1, Covered Processes – Laboratory or Process Facility

- Limitations on transfer air for exhaust air makeup §140.9(c)2
- Labs/process facilities with an exhaust system $\geq 10,000$ CFM must meet §140.9(c)3
- Fume hood automatic sash closure, for fume hood intensive labs §140.9(c)4



KEY WEB-LINK

2019 Title 24 Utility-Sponsored Stakeholder

<http://title24stakeholders.com/>

Building Energy Efficiency Program

<http://www.energy.ca.gov/title24/>

Comments to be submitted to

<https://efiling.energy.ca.gov/EComment/EComment.aspx?docketnumber=17-BSTD-01>



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