

**Title 24-2013 Bucket**

**Typical Retrofit Actions**

**Code Compliance**

No-Action Necessary

Modification-in-Place  
§141.0 (b) 2 I iii a

Qualifies only as one or more of the following:  
1. Replacing Lamps & Ballasts without altering the luminaire listing

2. Changing the number or types of light source in luminaire  
a. lampholder renewal  
b. removal of lampholders  
c. relocation of lampholders  
d. related wiring

3. Changing the optical system in part or whole

4. Replacement of fixtures one-for-one with only disconnect/reconnect actions

Cannot be any of the following:  
1. Part of general remodeling  
2. Involve panelboard or branch circuit wiring, including line voltage switches, relays, contactors, dimmers, other controls UNLESS occupancy sensors or associated low-voltage power packs.  
3. Increase the lighting power density

Lighting Wiring Alterations:  
§141.0 (b) 2 I iv a

1. Excludes Modifications-in-Place  
2. Includes the following:  
a. Adding a new lighting circuit  
b. Modifying/relocating wiring to provide new power to new or relocated luminaires  
c. Replacing wiring between switch or panel board and luminaire(s).  
d. Replacing/installing a new lighting panel board.

Lighting System Alterations:  
§141.0 (b) 2 I i a

1. Excludes modifications in place.  
2. Excludes portable luminaires, furniture-mounted luminaires, and everything listed under §140.6 (a) 3  
3. Cannot increase the lighting power density of the space

Increased Power:  
§141.0 (b) 2 I v

- Energy Saver Lamps (28W T8, 49W T5HO, etc)
- Screw-in CFL/LED
- Add occupancy sensors
- Add daylighting sensors
- Installing a time-clock
- Add manual switch in series with ceiling occupancy sensors
- Replacing ballasts with no change in fixture wattage

- Delamp
- Reflectors
- Lenses or louver replacements
- Retrofit kits
- Relamp (different tech)
- Reballasting and changing fixture wattage
- Replace high-bay HID fixtures with high-bay LED or T8 fixtures, **one-for-one**

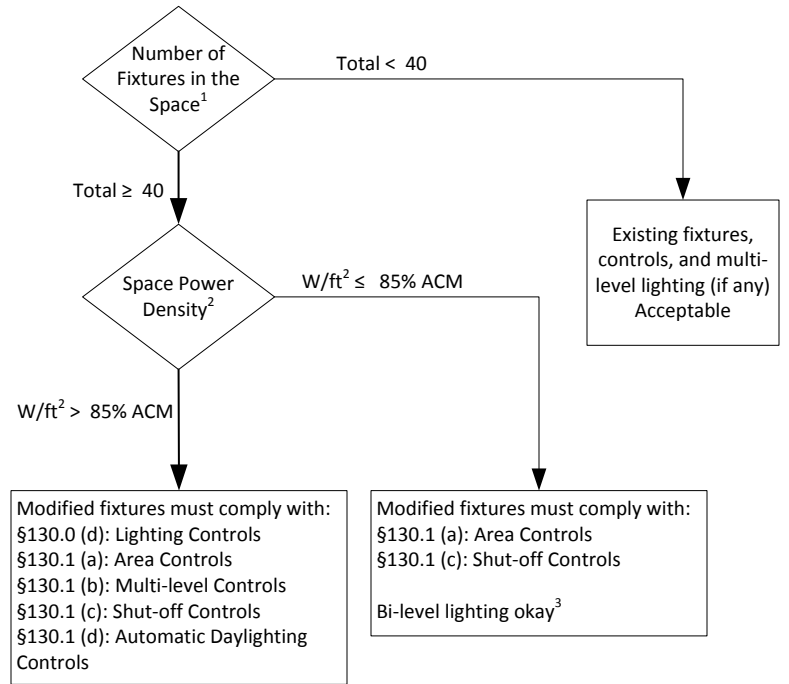
- Add manual switches giving occupants controls
- Add bi-level controls
- Add dimming controls
- Respace fixtures/adjusting layout

- Replace 2x4 T8 fixtures with high-output 2x2 LED fixtures
- Replace high-bay luminaires LED fixtures **and adjust layout**

None

- The Compliance Manual indicates relamping has no impact on the listed appliance power draw, therefore, code is not triggered. Similarly, taking these actions when code compliance is necessary does not satisfy code.
- There is no code language indicating the addition of additional controls to an existing facility (with no other changes) triggers code.

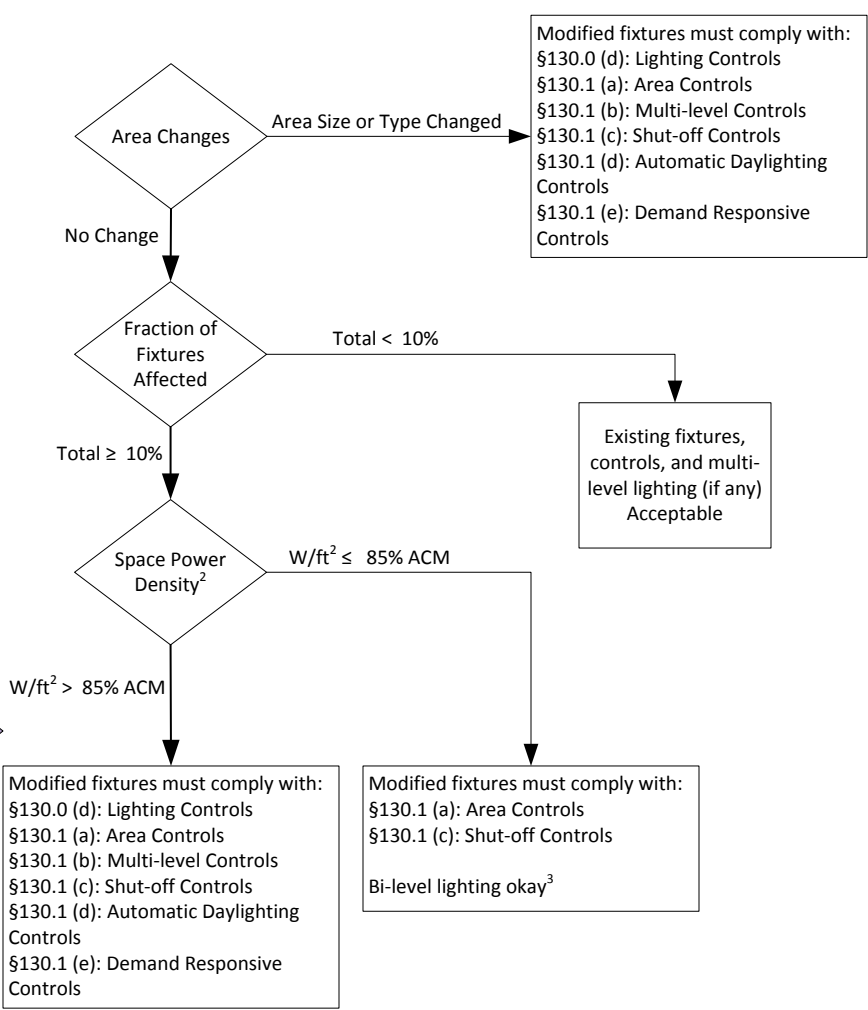
**Table 141.0-F**



**Notes:**  
1. A space is defined as:  
(1) a complete single story building,  
(2) a complete floor in a multifloor building,  
(3) an entire space in a building under a single lease,  
(4) all of the common, non-leasable space in a single building.  
2. Compare against §140.6 Area Category Method W/ft²  
3. Must have one step between 30% and 70% of design lighting power, "reasonably" uniform

**§141.0 (b) 2 I iv** Modified fixtures must comply with:  
§110.9 Lighting Controls  
§130.1 (a): Area Controls  
§130.1 (b): Multi-level Controls  
§130.1 (c): Shut-off Controls  
§130.1 (d): Automatic Daylighting Controls  
§130.1 (e): Demand Responsive Controls  
§130.4 Acceptance & Installation Certification Requirements

**Table 141.0-E**



**Notes:**  
2. Compare against §140.6 Area Category Method W/ft²  
3. Must have one step between 30% and 70% of design lighting power, "reasonably" uniform

Modified fixtures must comply with:  
§110.9: Lighting Controls  
§130.0: Lighting Controls & Equipment General  
§130.1 (a): Area Controls  
§130.1 (b): Multi-level Controls  
§130.1 (c): Shut-off Controls  
§130.1 (d): Automatic Daylighting Controls  
§130.1 (e): Demand Responsive Controls  
§130.4: Acceptance & Installation Certification Requirements  
§140.3 (c): Minimum Daylighting Requirements for Large Enclosed Spaces  
§140.6: Prescriptive Lighting Requirements

