POLICY NUMBER: 22

APPROVAL DATE: March 8, 2018

SUBJECT: Permitting and Inspection Requirements for Nonresidential Lighting Alterations

This guideline is developed by the Tri-chapter Uniform Code Committee and is intended to enhance regional consistency in application and enforcement of the Building Code. Please verify acceptance of this guideline with your local building department prior to its application.

ISSUE(S):

Recognizing the value of LED technology, the 2016 California Energy Code has new provisions which allow the retrofit of existing luminaires under certain conditions without having to perform any other related work. (See text of Title 24, Part 6, Section 141 in the reference section below.) The compliance form documentation for retrofits has been simplified to make it easier for contractors, engineers and building departments to show compliance with a minimal effort.

The purpose of this policy is to allow, in most circumstances, for the over the counter issuance of non-residential lighting retrofit permits. The necessary information to complete the Title 24 compliance forms is the luminaire quantity, existing wattage, and how the existing wattage was determined. The total existing wattage is then multiplied by 50 percent or 35 percent, depending on occupancy type. The resultant figure is the total allowed wattage after retrofit.

If an accurate project description including, luminaire types, locations and precise count is given, and if the required compliance forms are completed correctly, then reflected ceiling plans or floor plans should not be necessary. The completed compliance forms should be sufficient to determine code compliance both at the permit counter and during field inspection.

Allowing for over the counter issuance of lighting retrofit permits will save time and expense for contractors, building owners and jurisdictions alike. It will also help to avoid overly restrictive permitting requirements which would deter from performing these types of energy-saving retrofits.

There is usually no issue with LED lighting meeting or exceeding the required foot-candle illumination requirements of the California Building Code. Notwithstanding, if the jurisdiction determines that the installation will affect code-related requirements such as exit illumination or fire-resistive construction, the applicant may be required to provide additional information in the form of plans or other explanatory material. The 2016 California Electrical Code Section 410.6 requires lighting retrofit kits to be listed and installed in accordance with the installation instructions. The correct use of listed retrofit kits should be sufficient to address these concerns. Modifications of luminaires, other than (1) in accordance with a listed retrofit kit or (2) a “like for like” replacement of a component, are not covered by this policy.
NOTE: This policy addresses non-residential lighting retrofits in Section 141.0(b)(2).J.ii. There are similar provisions for luminaire in-kind replacement alterations in Section 141.0(b)(2).I.ii.

PROPOSED GUIDELINE:

1) Application and Permitting Process:

   The applicant shall provide the completed Title 24 compliance forms. These forms are NRCC-LTI-01-E and NRCC-LTI-06-E. The Energy Commission has also recently made dynamic compliance forms available online – see the link in the reference section below. Reflected ceiling plans are not necessary if the project can be clearly described on the Title 24 compliance forms.

   If multiple permits are to be obtained at the same time in one jurisdiction, the applicant shall provide the information necessary in advance so that the jurisdiction has sufficient time to prepare the permits for issuance. The advance time frame is at the discretion of the individual jurisdiction.

   The permit application and Title 24 compliance forms shall clearly describe which luminaires are to be retrofitted and their locations (e.g., label the room(s) where the luminaires are located). If some existing luminaires are not being retrofitted, their number and location shall also be clearly described.

2) Inspection Process:

   The permittee/contractor shall be responsible for all job site access, including ladders if necessary. The permit, inspection record and approved compliance forms shall be readily available to the field inspector.

   The inspector may require visual inspection of (or spot check) as many luminaires as necessary to verify compliance.

REFERENCES:

Title 24, Part 6 Section 141.0(b)(2).J.ii: (Relevant section in bold and underline):

Luminaire Component Modifications. Luminaire component modifications in place that include replacing the ballasts or drivers and the associated lamps in the luminaire, permanently changing the light source of the luminaire, or changing the optical system of the luminaire, where 70 or more existing luminaires are modified either on any single floor of a building or, where multiple tenants inhabit the same floor, in any single tenant space, in any single year, shall not prevent or disable the operation of any multi-level, shut-off, or daylighting controls, and shall:

   i. Meet the lighting power allowance in Section 140.6 and comply with Table 141.0-E; or

   ii. In office, retail, and hotel occupancies have at least 50 percent, and in all other occupancies have at least 35 percent, lower rated power at full light output as compared to the original luminaires prior to being modified, and meet the requirements of Sections 130.1(a)1, 2, and 3, 130.1(c)1A through C, 130.1(c)2, 130.1(c)3, 130.1(c)4, 130.1(c)5, 130.1(c)6A, and for parking garages 130.1(c)7B.

Required Compliance Forms:

NRCC-LTI-01-E
NRCC-LTI-06-E

2016 Nonresidential Compliance Manual: Chapter 5 Nonresidential Indoor Lighting; Table 5-4 and Section 5.9.5 Alterations – Luminaire Component Modifications (includes guidance and example project scenarios): http://www.energy.ca.gov/2015publications/CEC-400-2015-033/chapters/chapter_05_indoor_lighting.pdf


Fact Sheets for Nonresidential Lighting Alterations –

Building Officials: http://www.energy.ca.gov/2016publications/CEC-400-2016-010/CEC-400-2016-010-FS.pdf