

## CALIFORNIA ENERGY COMMISSION

## BLUEPRINT

## EFFICIENCY DIVISION

Issue 105 November - December 2014

## New Compliance Documents Without Watermarks Available

2013 Building Energy Efficiency Standards (Energy Standards) compliance documents are now available with no watermark.

The California Energy Commission (Energy Commission) has simplified the permitting process by creating new compliance and installation documents without watermarks for simple alterations and additions to existing residential buildings that do not require HERS field verification and registration.

This applies to the following compliance documents:

Alterations:

[CF1R-ALT-05-E](#)

[CF2R-ALT-05-E](#)

Additions:

[CF1R-ADD-02-E](#)

[CF2R-ADD-02-E](#)

Electronic copies of these compliance documents are available on the Energy Commission's website at:

[www.energy.ca.gov/title24/2013standards/res\\_compliance\\_forms/](http://www.energy.ca.gov/title24/2013standards/res_compliance_forms/)

## 2016 Energy Standards Workshop

Energy Commission staff is conducting a workshop to present draft revisions to be considered for inclusion in the 2016 Building Energy Efficiency Standards for Residential and Nonresidential Buildings (California Code of Regulations, Title 24, Part 1, Chapter 10, and Part 6, including the associated Reference Appendices and Alternative Calculation Method Manuals), and the voluntary energy efficiency related provisions in the California Green Building Standards (CalGREEN)

(California Code of Regulations, Title 24, Part 11).

The workshop will be used to solicit public comment on the proposed revisions and will be held:

**Monday, November 3, 2014  
9:00 a.m.**

CALIFORNIA ENERGY  
COMMISSION  
1516 Ninth Street  
Hearing Room A  
Sacramento, California

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Teleconference option: interested parties and the public may attend the public workshop in person at the above location or by telephone and/or by computer via our "WebEx" web conferencing system.

For additional details on how to participate via WebEx, please see the notice at:

[www.energy.ca.gov/title24/2016standards/prerulemaking/documents/#11032014](http://www.energy.ca.gov/title24/2016standards/prerulemaking/documents/#11032014)

For more information about the 2016 Building Energy Efficiency Standards proceeding, including the schedule for future workshops and public comment opportunities, please visit:

[www.energy.ca.gov/title24/2016standards/prerulemaking/](http://www.energy.ca.gov/title24/2016standards/prerulemaking/)

## Existing Conditions Compliance Documents

The CalCERTS, Inc. registry is now accepting CF1Rs that call for existing conditions verification and CF3R-EXC-20-H compliance documents that are used to document that verification. Currently, all CalCERTS, Inc. Whole House Raters, in good standing, may perform existing conditions verifications and submit the CF3R-EXC-20-H compliance document to the registry.

Tutorials, including a webinar, on how to create a project that calls for existing conditions verifications are available on CalCERTS' Instructional Material website at:

[www.calcerts.com/TrainingMaterials.cfm](http://www.calcerts.com/TrainingMaterials.cfm)

For more information, please contact CalCERTS at:

Phone: (916) 985-3400 ext. 800

Email: [tech@calcerts.com](mailto:tech@calcerts.com)

## Q&A

### Light Emitting Diodes (LEDs)

**Is there a definition for Tubular LEDs and are there provisions that apply specifically to these products?**

No, tubular LED products are not defined differently nor handled differently from other LED retrofit approaches. LED retrofit options for linear and U-shaped fluorescent luminaires and lamps include products that use the existing lamp holders and products that are installed inside existing fluorescent troffers that do not make use of the lamp holders at all. All of these products are considered by the 2013 Energy Standards and meet requirements for inclusion in new construction.

**How are LED retrofits, for fluorescent luminaires, rated and classified, and are they rated differently if they are part of an addition, alteration, or repair?**

LED retrofits are rated and classified according to [Section 130.0\(c\)](#) whether they are a new installation, an addition, an alteration, or a repair. However, note that classification is based on the permanently installed components of the luminaire, not the lamps. If the retrofit is made up of LED lamps that use existing fluorescent ballasts for power, then the luminaire will be classified under [Section 130.0\(c\)6](#). Similarly, if the retrofit is made up of LED lamps paired with transformers (such as drivers), then the luminaires or permanently installed (hard-wired) LED light engines will be classified under [Section 130.0\(c\)9](#).

**Can an LED retrofit be part of a lighting system alteration or a Luminaire Modification-in-Place, as described in [Section 141.0\(b\)2I](#)?**

Yes, LED retrofits of appropriate types can be part of a lighting system alteration or a Luminaire Modification-in-Place covered by the 2013 Energy Standards. However, this will not exempt them from needing to be rated and classified according to [Section 130.0\(c\)](#).

I'm considering a lamp changeout of an existing lighting system and there are no alterations on the wiring or lighting system other than installing new lamps (I am just replacing tubular fluorescent lamps with tubular LED lamps). Does this trigger 2013 Energy Standard requirements?

No, this kind of indoor lighting alteration is not considered a Luminaire Modification-in-Place and is addressed by the language in [Section 141.0\(b\)2Ivii](#) that specifies compliance is not required.

**Are all LED retrofits considered lighting system alterations? Are any LED retrofits not covered by the 2013 Energy Standards?**

The 2013 Energy Standards specify that some indoor lighting alterations are not covered by the lighting requirements. [Section 141.0\(b\)2Ivii](#) reads as follows:

*The following indoor lighting alterations are not required to comply with the lighting requirements in Title 24, Part 6:*

*a. Replacement in kind of parts of an existing luminaire that include only new lamps, lamp holders, or lenses, when replacement of those parts is not a Luminaire-Modification-in-Place in accordance with [Section 141.0\(b\)2Iiii](#).*

*b. Lighting Alterations directly caused by the disturbance of asbestos.*

**EXCEPTION to [Section 141.0\(b\)2Ivii](#):** *Lighting alterations made in conjunction with asbestos abatement shall comply with the applicable requirements in [Section 141.0\(b\)2I](#).*

[Section 141.0\(b\)2Ivii](#) applies to retrofits where the only change to the lighting system is to replace a fluorescent lamp with an equivalent LED lamp (the shape of the respective lamps does not matter).

I'm considering including lamp changeouts as part of a larger covered lighting system alteration. As this means that some luminaires will be classified under [Section 130.0\(c\)6](#) even though they are using LED lamps, can I use Reference Nonresidential [Appendix NA8](#) to determine their luminaire power?

Yes, if a lamp changeout is part of a covered lighting system alteration, Reference Nonresidential [Appendix NA8](#) can be used to determine luminaire power where fluorescent ballasts are used by LED lamps. Simply find the matching ballast and type/length of linear or U-shaped fluorescent lamp, and use this value. If more than one value applies use the smallest appropriate value.

The California Energy Commission welcomes your feedback on *Blueprint*. Please contact Andrea Bailey at [Title24@energy.ca.gov](mailto:Title24@energy.ca.gov).

**CALIFORNIA ENERGY COMMISSION**

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Need Help? Energy Standards Hotline  
(800) 772-3300 (toll-free in CA)

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