

**DOCKETED**

<b>Docket Number:</b>	15-BSTD-02
<b>Project Title:</b>	Residential Compliance Manual and Documents
<b>TN #:</b>	232819-1
<b>Document Title:</b>	2016-CF2R-LTG-02-E-Lighting-MultiFamilyDwellingspdf
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CERTIFICATE OF INSTALLATION		CF2R-LTG-02-E
Lighting – Multi-Family Dwellings		(Page 1 of 4)
Project Name:	Enforcement Agency:	Permit Number:
Dwelling Address:	City:	Zip Code:

<b>A. Installed Lighting and Controls</b>		
Select Yes or No according to whether your work on the project includes each of the following types of lighting and controls. See Section B. thru N. for applicable compliance requirements.		Y or N
01	High efficacy luminaires installed in any interior rooms. (See Section B.)	
02	JA8 compliant luminaires and controls installed in any interior rooms. (See Section B.)	
03	Recessed downlight luminaires in ceilings in any interior rooms. (See Section C.)	
04	Screw-based luminaires installed in any interior rooms. (See Section D.)	
05	Lighting and controls in bathrooms. (See Section E.)	
06	Lighting and controls in laundry rooms. (See Section E.)	
07	Lighting and controls in utility rooms. (See Section E.)	
08	Lighting and controls in garage. (See Section E.)	
09	Outdoor lighting and controls. (See Section H. & J.)	
10	Blank electrical boxes installed more than 5 feet from finished floor. (See Section F.)	
11	Internally illuminated address signs. (See Section G.)	
12	Parking Garages. (See Section L.)	
13	Parking lots or carports. (See Section I., J. & K.)	
14	Common areas. See (Section M. & N.)	

<b>B. High Efficacy Luminaires and Controls</b>	
01	All luminaires are installed with: <ul style="list-style-type: none"> <li>Light sources of one of the light source technologies indicated under the "High Efficacy" column of TABLE 150.0-A; or</li> <li>JA8 compliant light sources and the light sources are marked with a label reading "JA8-2016" or "JA8-2016-E".</li> </ul>
02	150.0(k)2K: Dimmers or vacancy sensor control all luminaires required to have JA8 compliant light sources.
03	150.0(k)2A: Forward phase cut dimmers used shall comply with NEMA SSL 7A.
<b>The responsible person's signature on this compliance document affirms that all applicable requirements in this table have been met.</b>	

<b>C. Recessed Downlight Luminaires in Ceilings</b>	
01	150.0(k)1Cvi: Contain JA8 compliant light sources that are marked with a label reading "JA8-2016-E".
02	150.0(k)1Ci: Listed for zero clearance insulation contact (IC).
03	150.0(k)1Cii: Has label certifying air tight.
04	150.0(k)1Ciii: Sealed with a gasket or caulk between the luminaire housing and ceiling, and all air leakage paths between conditioned and unconditioned spaces are sealed with a gasket or caulk.
05	150.0(k)1Civ: Allows ballast maintenance and replacement to be readily accessible to building occupants from below the ceiling without requiring the cutting of holes in the ceiling.
06	150.0(k)1Cv: Do not contain screw based sockets.
<b>The responsible person's signature on this compliance document affirms that all applicable requirements in this table have been met.</b>	

<b>D. Additional Luminaire Requirements</b>	
01	150.0(k)1G: Screw based luminaires are installed with all of the following requirements: <ul style="list-style-type: none"> <li>The luminaire is not recessed downlight luminaire in ceilings; and</li> <li>The luminaire contains a JA8 compliant lamps.</li> </ul>
02	150.0(k)1H: No light sources marked "not for use in enclosed fixture" or "not for use in recessed fixture" are installed in enclosed luminaires.
03	150.0(k)1D: Ballasts for fluorescent lamps rated 13 Watts or greater are electronic.
04	150.0(k)1E: Night lights are rated to consume no more than 5 Watts of power
05	150.0(k)1F: Lighting integral to exhaust fans meets all applicable requirements of Section 150.0(k)
<b>The responsible person's signature on this compliance document affirms that all applicable requirements in this table have been met.</b>	



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<b>E. Additional Lighting Controls</b>	
01	150.0(k)2J: In bathrooms, garages, laundry rooms, and utility rooms, at least one luminaire in each of these spaces are controlled by a vacancy sensor.
02	150.0(k)2A: Forward phase cut dimmers used shall comply with NEMA SSL 7A.
03	150.0(k)2B: Exhaust fans are switched separately from lighting systems, or can be switched OFF in accordance with EXCEPTION.
04	150.0(k)2C: Luminaires are switched with readily accessible controls that permit luminaires to be manually switched ON and OFF.
05	150.0(k)2D: Lighting controls and equipment are installed in accordance with manufacturer's instructions
06	150.0(k)2E: No controls are installed that bypass a dimmer or vacancy sensor function where that dimmer or vacancy sensor has been installed to comply with Section 150.0(k)
07	150.0(k)2F: Lighting control devices have been Certified to the Energy Commission as applicable; lighting control systems comply with the applicable requirements in Section 110.9.
08	150.0(k)2G: Energy Management Control Systems used to comply with dimmer requirements provide the functionality of a dimmer in accordance with Section 110.9, meet the installation certificate requirements in Section 130.4, the EMCS requirements in Section 130.5, and comply with all other applicable requirements in Section 150.0(k)2.
09	150.0(k)2H: Energy Management Control Systems used to comply with vacancy sensor requirements in Section 150.0(k) provide the functionality of a vacancy sensor in accordance with Section 110.9, meet the installation certificate requirements in Section 130.4, the EMCS requirements in Section 130.5, and comply with all other applicable requirements in Section 150.0(k)2.
10	150.0(k)2I: A multi-scene programmable controller used to comply with dimmer requirements provides the functionality of a dimmer in accordance with Section 110.9, and complies with all other applicable requirements in Section 150.0(k)2.
11	150.0(k)2L: Undercabinet lighting is switched separately from other lighting system.
<b>The responsible person's signature on this compliance document affirms that all applicable requirements in this table have been met.</b>	

<b>F. Blank Electrical Boxes</b>	
01	150.0(k)2: The number of blank electrical boxes installed more than 5 feet above the finished floor, are not greater than the number of bedrooms. The blank boxes are served by a dimmer, a vacancy sensor or fan speed control.
<b>The responsible person's signature on this compliance document affirms that all applicable requirements in this table have been met.</b>	

<b>G. Address Signs</b>	
01	150.0(k)4: Internally illuminated address signs. Internally illuminated address signs shall either: <ol style="list-style-type: none"> <li>Comply with Section 140.8. Applicable nonresidential sign lighting compliance forms shall also be submitted, or</li> <li>Consume no more than 5 watts of power, determined according to Section 130.0(c).</li> </ol>
<b>The responsible person's signature on this compliance document affirms that all applicable requirements in this table have been met.</b>	

<b>H. For Low-rise Multi-family Residential Buildings, Outdoor Lighting for Private Patios, Entrances, Balconies and Porches</b>	
01	150.0(k)3Bi: Outdoor lighting are controlled by a manual ON and OFF switch and one of the following automatic control types: <ul style="list-style-type: none"> <li>• Photocontrol and motion sensor;</li> <li>• Photocontrol and automatic time switch control;</li> <li>• Astronomical time clock that automatically turns the lighting OFF during daytime hours;</li> <li>• Energy management control system (EMCS) that provides the functionality of an astronomical time clock, does not have an override that allows the luminaire to be always ON, and is programmed to automatically turn outdoor lighting off during daytime hour; or</li> </ul>
02	150.0(k)3Bii: Outdoor lighting complies with the applicable requirements in Sections 110.9, 130.0, 130.2, 130.4, 140.7, and 141.0. Applicable LTO forms shall also be submitted.
<b>The responsible person's signature on this compliance document affirms that all applicable requirements in this table have been met.</b>	



CERTIFICATE OF INSTALLATION		CF2R-LTG-02-E
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<b>I. Outdoor Lighting for Residential Parking Lots and Residential Carports with Less than Eight Vehicles per Site</b>	
01	150.0(k)3Bi: Outdoor lighting are controlled by a manual ON and OFF switch and one of the following automatic control types: <ul style="list-style-type: none"> <li>• Photocontrol and motion sensor;</li> <li>• Photocontrol and automatic time switch control;</li> <li>• Astronomical time clock that automatically turns the lighting OFF during daytime hours;</li> <li>• Energy management control system (EMCS) that provides the functionality of an astronomical time clock, does not have an override that allows the luminaire to be always ON, and is programmed to automatically turn outdoor lighting off during daytime hour; or</li> </ul>
02	150.0(k)3Bii: Outdoor lighting complies with the applicable requirements in Sections 110.9, 130.0, 130.2, 130.4, 140.7, and 141.0. Applicable LTO forms shall also be submitted.
<b>The responsible person's signature on this compliance document affirms that all applicable requirements in this table have been met.</b>	

<b>J. For Low-rise Multi-family Buildings with Four or More Dwelling Units, Outdoor Lighting for Other than Private Patios, Entrances, Balconies, Porches, or for Other than Residential Parking Lots and Residential Carports with Eight or More Vehicles</b>	
01	150.0(k)3C: Outdoor lighting complies with the applicable requirements in Sections 110.9, 130.0, 130.2, 130.4, 140.7, and 141.0. Applicable LTO forms shall be submitted.
<b>The responsible person's signature on this compliance document affirms that all applicable requirements in this table have been met.</b>	

<b>K. Outdoor Lighting for Residential Parking Lots and Residential Carports with Eight or More Vehicles per Site</b>	
01	150.0(k)3D: Outdoor lighting complies with the applicable requirements in Sections 110.9, 130.0, 130.2, 130.4, 140.7, and 141.0. Applicable LTO forms shall also be submitted.
<b>The responsible person's signature on this compliance document affirms that all applicable requirements in this table have been met.</b>	

<b>L. Lighting for Residential Garages with Eight or More Vehicles</b>	
01	150.0(k)5: Lighting complies with the applicable requirements for nonresidential garages in Sections 110.9, 130.0, 130.1, 130.4, 140.6, and 141.0. Applicable LTG forms shall also be submitted.
<b>The responsible person's signature on this compliance document affirms that all applicable requirements in this table have been met.</b>	

<b>M. Lighting for Interior Common Areas (<math>\leq</math> 20%) of Low-rise Multi-family</b>	
01	150.0(k)6A: Installed luminaires are high efficacy and controlled by an occupancy sensor.
<b>The responsible person's signature on this compliance document affirms that all applicable requirements in this table have been met.</b>	

<b>N. Lighting for Interior Common Areas (<math>&gt;</math> 20%) of Low-rise Multi-family</b>	
01	150.0(k)6Bi: Lighting complies with the applicable requirements in Sections 110.9, 130.0, 130.1, 140.6, and 141.0. Applicable nonresidential lighting compliance (NRCC-LTG) forms shall also be submitted.
02	150.0(k)6Bii: Lighting installed in corridors and stairwells is controlled by occupant sensors that reduce the lighting power by at least 50% and capable of turning light fully on and off.
<b>The responsible person's signature on this compliance document affirms that all applicable requirements in this table have been met.</b>	



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<b>DOCUMENTATION AUTHOR'S DECLARATION STATEMENT</b>	
1. I certify that this Certificate of Installation documentation is accurate and complete.	
Documentation Author Name:	Documentation Author Signature:
Documentation Author Company Name:	Date Signed:
Address:	CEA/HERS Certification Identification (if applicable):
City/State/Zip:	Phone:

<b>RESPONSIBLE PERSON'S DECLARATION STATEMENT</b>		
I certify the following under penalty of perjury, under the laws of the State of California:		
<ol style="list-style-type: none"> <li>The information provided on this Certificate of Installation is true and correct.</li> <li>I am either: a) a responsible person eligible under Division 3 of the Business and Professions Code in the applicable classification to accept responsibility for the system design, construction, or installation of features, materials, components, or manufactured devices for the scope of work identified on this Certificate of Installation, and attest to the declarations in this statement, or b) I am an authorized representative of the responsible person and attest to the declarations in this statement on the responsible person's behalf.</li> <li>The constructed or installed features, materials, components or manufactured devices (the installation) identified on this Certificate of Installation conforms to all applicable codes and regulations and the installation conforms to the requirements given on the Certificate of Compliance, plans, and specifications approved by the enforcement agency.</li> <li>I will ensure that a registered copy of this Certificate of Installation shall be posted or made available with the building permit(s) issued for the building, and made available to the enforcement agency for all applicable inspections. I understand that a registered copy of this Certificate of Installation is required to be included with the documentation the builder provides to the building owner at occupancy.</li> </ol>		
Responsible Builder/Installer Name:	Responsible Builder/Installer Signature:	
Company Name: (Installing Subcontractor or General Contractor or Builder/Owner)	Position With Company (Title):	
Address:	CSLB License:	
City/State/Zip:	Phone:	Date Signed:

## CF2R-LTG-02-E User Instructions

There are two version of the residential lighting Certificate of Installation. This version, the CF2R-LTG-02-E, is used for demonstrating compliance with the residential lighting Standards for low-rise multi-family dwellings.

The other version of the lighting Certificate of Installation, the CF2R-LTG-01-E, is used for demonstrating compliance with the residential lighting Standards for single family dwellings. The LTG-01 shall also be used to demonstrate compliance with the residential lighting requirements for high-rise residential dwelling units; outdoor lighting that is attached to a high-rise residential or hotel/motel building, and is separately controlled from the inside of a dwelling unit or guest room; fire station dwelling accommodations; hotel and motel guest rooms; and, dormitory and senior housing dwelling accommodations.

The primary difference between the LTG-02 and LTG-01 is that the LTG-02 includes additional requirements for demonstrating compliance with residential outdoor lighting, and common areas associated with low-rise multi-family dwelling unit.

Each dwelling unit shall separately comply with all of the applicable residential lighting Standards. Note that rooms and areas that are not within a dwelling unit shall comply with the nonresidential lighting Standards, and the nonresidential lighting compliance documents must also be submitted.

### Section A. Checklist for Lighting and Controls Installed at this Site

This table is used to identify the scope of work being covered by the responsible person signing this document. One person may be responsible for all of the measures in this table, or several people may each be responsible for only a portion of the measures. If several people are responsible, each person must separately fill out this Certificate of Installation for those measures for which they are responsible. In some situations, such as for alterations and additions, only some of the measures may be included in the total scope of work.

For rows 1 through 14 – insert ‘Y’ for each measure that is included in the scope of work, and insert ‘N’ for each measure that is not included in the scope of work.

### Section B. High Efficacy Luminaires and Controls

This table is a list of mandatory requirements high efficacy luminaires.

### Section C. Recessed Downlight Luminaires in Ceilings

This table is a list of mandatory requirements for recessed downlight luminaires.

### Section D. Additional Luminaire Requirements

This table is a list of additional requirements for luminaires.

### Section E. Additional Lighting Controls

This table is a list of additional requirements for lighting controls.

### Section F. Blank Electrical Boxes

This table is a list of mandatory requirements for blank electrical boxes.

### Section G. Address Signs

This table is a list of mandatory requirements for address signs.

### Section H. For Low-rise Multi-family Residential Buildings, Outdoor Lighting for Private Patios, Entrances, Balconies and Porches

This table is a list of mandatory requirements for low-rise multi-family residential buildings, outdoor lighting for private patios, entrances, balconies and porches.

### Section I. Outdoor Lighting for Residential Parking Lots and Residential Carports with Less than Eight Vehicles per Site

This table is a list of mandatory requirements for outdoor lighting for residential parking lots and residential carports with less than eight vehicles per site.

### Section J. For Low-rise Multi-family Buildings with Four or More Dwelling Units, Outdoor Lighting for Other than Private Patios, Entrances, Balconies, Porches, or for Other than Residential Parking Lots and Residential Carports with Eight or More Vehicles

This table is a list of mandatory requirements for low-rise multi-family buildings with four or more dwelling units, outdoor lighting for other than private patios, entrances, balconies, porches, or for other than residential parking lots and residential carports with eight or more vehicles.

**Section K. Outdoor Lighting for Residential Parking Lots and Residential Carports with Eight or More Vehicles per Site**

This table is a list of mandatory requirements for outdoor lighting for residential parking lots and residential carports with eight or more vehicles per site.

**Section L. Lighting for Residential Garages with Eight or More Vehicles**

This table is a list of mandatory requirements for lighting for residential garages with eight or more vehicles.

**Section M. Lighting for Interior Common Areas ( $\leq 20\%$ ) for Low-rise Multi-family**

This table is a list of mandatory requirements for lighting for interior common areas ( $\leq 20\%$ ) for low-rise multi-family.

**Section N. Lighting for Interior Common Areas ( $> 20\%$ ) for Low-rise Multi-family**

This table is a list of mandatory requirements for lighting for interior commons areas ( $> 20\%$ ) for low-rise multi-family.

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