

NA7.7 Outdoor Lighting Acceptance Tests

Project Name/Address:

System Name or Identification/Tag:

System Location or Area Served:

Enforcement Agency:

Permit Number:

Note: Submit one Certificate of Acceptance for each system that must demonstrate compliance.

Enforcement Agency Use: Checked by/Date

Documentation Author's Declaration Statement

- I certify that this Certificate of Acceptance documentation is accurate and complete.

Name:

Signature:

Company :

Date:

Address:

If Applicable: CEA or CEPE (Certification #):

City/State/Zip:

Phone:

FIELD TECHNICIAN'S DECLARATION STATEMENT

- I certify under penalty of perjury, under the laws of the State of California, the information provided on this form is true and correct.
- I am the person who performed the acceptance requirements verification reported on this Certificate of Acceptance (Field Technician).
- I certify that the construction/installation identified on this form complies with the acceptance requirements indicated in the plans and specifications approved by the enforcement agency, and conforms to the applicable acceptance requirements and procedures specified in Reference Nonresidential Appendix NA7.
- I have confirmed that the Installation Certificate(s) for the construction/installation identified on this form has been completed and is posted or made available with the building permit(s) issued for the building.

Company Name:

Field Technician's Name:

Field Technician's Signature:

Date Signed:

Position With Company (Title):

RESPONSIBLE PERSON'S DECLARATION STATEMENT

- I certify under penalty of perjury, under the laws of the State of California, that I am the Field Technician, or the Field Technician is acting on my behalf as my employee or my agent and I have reviewed the information provided on this form.
- I am a licensed contractor, architect, or engineer, who is eligible under Division 3 of the Business and Professions Code, in the applicable classification, to take responsibility for the scope of work specified on this document and attest to the declarations in this statement (responsible person).
- I certify that the information provided on this form substantiates that the construction/installation identified on this form complies with the acceptance requirements indicated in the plans and specifications approved by the enforcement agency, and conforms to the applicable acceptance requirements and procedures specified in Reference Nonresidential Appendix NA7.
- I have confirmed that the Installation Certificate(s) for the construction/installation identified on this form has been completed and is posted or made available with the building permit(s) issued for the building.
- I will ensure that a completed, signed copy of this Certificate of Acceptance 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 signed copy of this Certificate of Acceptance is required to be included with the documentation the builder provides to the building owner at occupancy.

Company Name:

Phone:

Responsible Person's Name:

Responsible Person's Signature:

License:

Date Signed:

Position With Company (Title):

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NA7.7.1 Outdoor Motion Sensor Acceptance

Intent: Luminaires that can accept an incandescent lamp (for instance, screw-base fixtures) rated over 100W are controlled with a motion sensor per Section 130.2(a).
Luminaires mounted 24 feet or below are controlled with a motion sensor per Section 130.2(c)3A

Construction Inspection

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|--------------------------|--|
| 1. | Motion Sensor Construction Inspection |
| <input type="checkbox"/> | Motion sensor has been located to minimize false signals |
| <input type="checkbox"/> | Sensor is not triggered by motion outside of controlled area |
| <input type="checkbox"/> | Desired motion sensor coverage is not blocked by obstruction that could adversely affect performance |

Functional testing

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| 1. | Simulate motion of a pedestrian in area under lights controlled by the motion sensor. Verify and document the following: |
| <input type="checkbox"/> | Status indicator operates correctly. |
| <input type="checkbox"/> | Lights controlled by motion sensors turn on immediately upon entry into the area lit by the controlled lights near the motion sensor |
| <input type="checkbox"/> | Signal sensitivity is adequate to achieve desired control |
| 2. | Simulate no motion in area with lighting controlled by the sensor but with pedestrian motion adjacent to this area. Verify and document the following: |
| <input type="checkbox"/> | |
| <input type="checkbox"/> | The occupant sensor does not trigger a false “on” from movement outside of the controlled area |
| <input type="checkbox"/> | Signal sensitivity is adequate to achieve desired control. |

NA7.7.2 Outdoor Lighting Automatic Shut-off Controls

Construction Inspection

Intent: All installed outdoor lighting shall be controlled by a photocontrol or outdoor astronomical time-switch control that automatically turns OFF the outdoor lighting when daylight is available, per Section 130.2(c)1. All outdoor lighting shall also be controlled by an automatic scheduling control that automatically turns OFF the lighting outside of business hours or occupied times. Certain types of outdoor lighting shall also be controlled by motion sensor controls. Outdoor lighting shall be circuited separately from other electrical loads.

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| 1. | Outdoor Lighting Shut-off Controls Construction Inspection |
| <input type="checkbox"/> | Astronomical time switch controls and automatic time switch controls have been certified to the Energy Commission in accordance with the applicable provision in Standards Section 110.9. Verify that model numbers of all such controls are listed on the Energy Commission database as “Certified Appliances & Control Devices.” |
| <input type="checkbox"/> | Controls to turn off lights during daytime hours are installed |
| <input type="checkbox"/> | Controls to turn off lights automatically on a time schedule (usually, outside business hours) are installed. |
| <input type="checkbox"/> | If installed, astronomical and standard time switch controls are programmed with acceptable weekday, weekend, and holiday (if applicable) schedules |
| <input type="checkbox"/> | Demonstrate and document for the owner time switch programming including weekday, weekend, holiday schedules as well as all set-up and preference program settings |
| 2. | Lighting systems that meet the criteria of Section 130.2(c)4 and 5 of the Standards shall have <u>either</u> : |
| <input type="checkbox"/> | A part-night outdoor lighting control as defined in Section 100.1, which meets the functional requirements of NA7.7.2.4 |
| <input type="checkbox"/> | Motion sensors capable of automatically reducing lighting power by at least 40 percent but not exceeding 80 percent, which have auto-ON functionality, and which meets the requirements of NA7.7.1 |
| <input type="checkbox"/> | A centralized time-based zone lighting control capable of automatically reducing lighting power by at least |

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50 percent. This control shall be certified to the Commission in accordance with the applicable provision in Standards section 110.9. Verify that model numbers of all such controls are listed on the Energy Commission database as “Certified Appliances & Control Devices.”

NA7.7.2.2 Outdoor Photocontrol Functional testing

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| 1. | Nighttime test. Simulate or provide conditions without daylight. Verify and document: |
| | <input type="checkbox"/> Controlled lights turn on |
| 2. | Sunrise test: Conduct this test between 10 minutes before and 30 minutes after sunrise time, or between 30 minutes before and 10 minutes after sunset time at the latitude and longitude of the luminaire, or provide between 10 and 100 horizontal footcandles (fc) to photosensor. Verify and document the following |
| | <input type="checkbox"/> Controlled lights turn off (or on at sunset) |

NA7.7.2.3 Astronomical Time Switch Functional testing

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| 1. | Power off test. Program control with location information, local date and time, and schedules. Disconnect control from power source for at least 1 hour. Verify and document: |
| | <input type="checkbox"/> Control retains all programmed settings and local date and time |
| 2. | Night schedule ON test. Simulate or provide times when the sun has set and lights are scheduled to be ON. Verify and document: |
| | <input type="checkbox"/> Controlled lights turn on |
| 3. | Night schedule OFF test. Simulate or provide times when the sun has set and lights are scheduled to be OFF. Verify and document: |
| | <input type="checkbox"/> Controlled lights turn off |
| 4. | Sunrise test: Simulate or provide the programmed offset time after the time of local sunrise |
| | <input type="checkbox"/> Controlled lights turn off |

NA7.7.2.4 Part Night Functional Testing

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| 1. | Power off test. Program control with local date and time and schedules. Disconnect control from power source for at least 1 hour. Verify and document: |
| | <input type="checkbox"/> Control retains all programmed schedules and local date and time |
| 2. | On schedule test. Simulate or provide times when lights are scheduled to be ON. Verify and document: |
| | <input type="checkbox"/> Controlled lights turn on |
| 3. | Schedule test. Simulate or provide times when the sun has set and lights are scheduled to be OFF. Verify and document: |
| | <input type="checkbox"/> Controlled lights turn off |