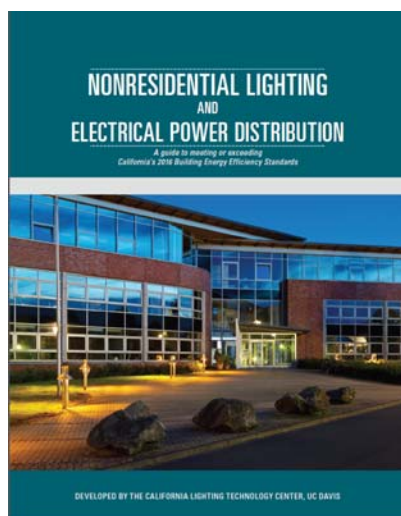


IN CLOSING

1. RESOURCES
2. CLOSING COMMENTS




Download the
2016 Title 24, Part 6
Nonresidential Lighting
and Electrical Power
Distribution Guide:

cltc.ucdavis.edu/publication/nonresidential-lighting-guide-2016-building-energy-efficiency-standards

LIGHTING CONTROLS ACCEPTANCE TESTING

MODULE 1: INTRODUCTION TO ACCEPTANCE TESTING



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www.energy.ca.gov/title24/2016standards



2016 Building Energy Efficiency Standards

California's Building Energy Efficiency Standards are updated on an approximately three-year cycle. The 2016 Standards will continue to improve upon the 2013 Standards for new construction of, and additions and alterations to, residential and nonresidential buildings. The effective date of the 2016 Standards is January 1, 2017.

2016 Energy Standards

- ▶ 2016 Building Energy Efficiency Standards for Residential and Nonresidential Buildings. (PDF File, 289 Pages, 2.3 mB)
 - ▶ Table 100.0-A Quick Links to Sections
- ▶ 2016 Reference Appendices. (PDF File, 494 Pages, 8.8 mB)

Compliance Manuals and Compliance Documents

- ▶ 2016 Residential Compliance Manual and Documents. (PDF File, 400-2016-030-CMF)
- ▶ 2016 Nonresidential Compliance Manual and Documents. (PDF File, 400-2016-030-CMF)

Worksheets

- ▶ Open and Closed Circuit Cooling Towers - Maximum Achievable Cycles Calculator. (XLS File)

Compliance Forms

- Residential
- Nonresidential

Reference Documents

- Rulemaking
- Pre-Rulemaking
- 2016 Standards Post-adoption Documents

Related Links

- Additional Manufacturer Certified Equipment, Products & Devices
- Appliance Efficiency Database
- California Climate Zone Map
- Online Resource Center

Contact Us

The screenshot shows the California Energy Commission's website for the Blueprint Newsletter. The header includes the CA.GOV logo, the California Energy Commission logo, and navigation links for Home, About Us, Analysis & Stats, Efficiency, Funding, Power Plants, Renewables, Research, and Transportation. A search bar is located in the top right. The main content area features a large image of a light bulb and the URL <http://www.energy.ca.gov/efficiency/blueprint/>. Below this, there is a breadcrumb trail: Home >> efficiency >> blueprint. The main heading is "Blueprint Newsletter". A link for "Compiled Blueprints (1986 to Current)" is provided with a file date of December 28, 2016 (PDF File, 38.7 MB). The current issue is "Issue 117, November - December 2016", titled "The Lighting Issue". It lists three topics: Title 24's JA8 and Title 20's State Regulated Lamp Requirements, 2016 Prescriptive Indoor Lighting Alteration Options, and Q&A. A thumbnail image of the newsletter cover is shown. Below this, "Issue 116, September 2016 - October 2016" is mentioned with the topic "Are You Ready for January 1, 2017?". On the right side, there is a "Subscribe" section titled "Blueprint List Serve" with "Automated Email Notifications". It includes a form with fields for "First name:" (with "Nicole" entered), "Last name:" (with "Graeber" entered), and "Email address:" (with "negraeber@ucdavis.edu" entered). A note states, "You will receive an email requesting that you confirm your subscription." There are "Send" and "Reset" buttons at the bottom of the form.

The screenshot shows the EnergyCodeAce website. The URL www.energycodeace.com is displayed in green at the top. The website header includes the EnergyCodeAce logo with the tagline "Helping you play your cards right", a search bar, and links for "Create Account", "Sign In", "About", and "Contact". The navigation menu includes Home, Tools Ace, Training Ace, Resources Ace, Outreach, and Title 20. A large banner features a microphone and the text: "Get your facts straight for next year. 2016 T24, Part 6 Fact Sheets now available!". Below the banner, a message reads: "Don't gamble on Title 24, Part 6 and Title 20 compliance. Ace it with:". Three service boxes are presented: "Ace + Tools™" (A variety of tools to help you identify the forms, installation techniques, and standards relevant to building projects in California.), "Ace + Training™" (Targeted classroom and online training on Title 24, Part 6 and Title 20 addressing a variety of stakeholders and measures.), and "Ace + Resources™" (Application Guides, Facts Sheets, Trigger Sheets and Checklists to help you understand how and when to comply with California's building code.). The footer contains the text "IN CLOSING | SECTION 8".

energycodeace.com/content/event-recordings

IN CLOSING | SECTION 8

EnergyCodeAce.com/resources

2016 ENERGY CODE
What's New with 2016 Code?

Overview
Changes to the nonresidential requirements in the 2016 Building Energy Efficiency Standards (Energy Standards) largely follow ASHRAE 90.1 national standards and include energy conservation measures related to the building envelope shown in Figure 1. The standards have been integrated, and the approval will be implemented for projects permitted on or after January 1, 2017. For more detailed information, see the 2016 AEC Overview.

Compliance Tools
The Compliance Tools are other related materials are being updated to reflect the adopted 2016 Energy Standards and are planned for the end of the month in 2016 on the EnergyCodeAce.com website.

2014 Title 24, Part 6

MECHANICAL	Mandatory Requirements	Notes
Systems & Equipment	110.20a	Amend language regarding certification of manufacturer return, equipment, appliances and building components, including to meet Title 24 requirements (efficiency, certification requirements per Title 24, Part 6) and considered as applied and that it is the responsibility of the manufacturer.
Heating Equipment Efficiency	110.20d	Table 110.2.0 Heating, cooling, water and ground-source heat pumps (GHP) minimum values (1/1/2015). Table 110.2.0 GHP and PMP COP minimum values (1/1/2015). Table 110.2.0 Oil-fuel and boiler minimum efficiency increased to 81% (1/1/2015). Table 110.2.0 Boiler minimum efficiency to change 10/2020.
Cooling Equipment Efficiency	110.20e	Table 110.2.0 Air conditioning, air cooled and water cooled (CR) minimum values (1/1/2015). Table 110.2.0 Air and water cooled heat pumps (HP) and CR minimum values (1/1/2015). Table 110.2.0 Air and water cooled (Chillers) Part A and B minimum efficiencies (1/1/2015). Table 110.2.0 Cooling mode (PAC, PMP and PMP-CR) minimum values (1/1/2015). Table 110.2.0 Suspended ceiling cooling towers added.
Space Conditioning Equipment	110.20-f	No Change.
Service Water Heating Systems & Equipment	110.20h	No Change. (1) Temperature control based on ASHRAE Handbook HVAC Applications (update volume 2011 to Table 1) can be revised within Standards; in volume 2015 it can be found in Chapter 10, Table 19.
Installation	110.20-i	Isolation valves: instantaneous water heaters with an input rating greater than 8.8 kW (30 CFM) shall have isolation valves on both the cold water supply and the hot water pipe leaving the water heater, and have labels on each valve for labeling the water heater when the valves are closed.
Pool & Spas	110.20b	No Change.
Pilot Lights	110.20-e	No Change.
Ventilation	110.20-d	No Change.

IN CLOSING | SECTION 8



Who We Are Focus Areas Affiliates Publications News & Events

Nonresidential Lighting and Electrical Power Distribution Guide for 2016 Building Energy Efficiency Standards



NONRESIDENTIAL LIGHTING
AND
ELECTRICAL POWER DISTRIBUTION

DEVELOPED BY THE CALIFORNIA LIGHTING TECHNOLOGY CENTER, LLC (CLTC)

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RESOURCES

When in Doubt...

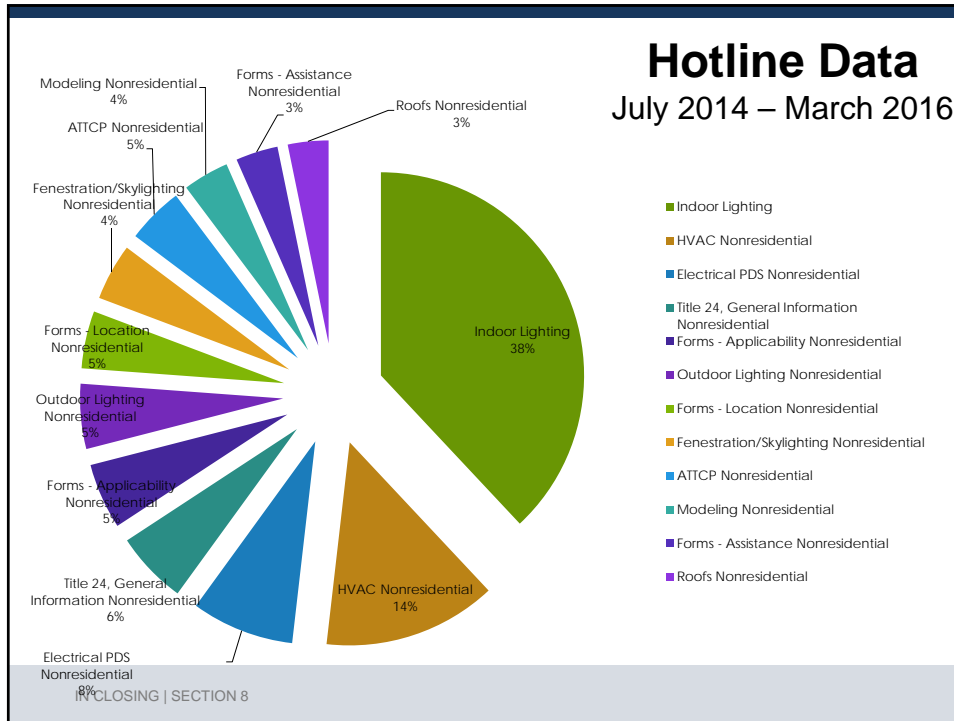
The California Energy Commission provides contacts for energy efficiency programs related to the Energy Standards:

Contacts for Energy Efficiency Programs

Energy Standards Hotline

Phone Numbers	Emails
» Toll-Free in California: 800-772-3300	» Appliances@energyc.ca.gov
» Outside California: 916-654-5106	» Title24@energyc.ca.gov
Fax Numbers	
» Appliance Efficiency: 916-654-4304	
» Building Energy Efficiency: 916-654-4304	

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RESOURCES

For more information:

California Energy Commission: Building Energy Efficiency Standards
<http://www.energy.ca.gov/title24/>

2016 Nonresidential Compliance Manual and Forms
http://www.energy.ca.gov/title24/2016standards/nonresidential_manual.html

Energy Code Ace
<http://energycodeace.com>

Southern California Edison
<http://www.sce.com/b-sb/energy-centers/energy-centers.htm>

San Diego Gas and Electric
<http://www.sdge.com/business/learn-and-save>

Pacific Gas and Electric Company
<http://www.pge.com/mybusiness/edusafety/training/>

IES – Illuminating Engineering Society
<http://www.iesna.org/>

California Lighting Technology Center, UC Davis
<http://cltc.ucdavis.edu/title24>

Questions?

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California Lighting Technology Center
University of California, Davis



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INNOVATION

PARTNERSHIP

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