



2022 Energy Code

Multifamily Outdoor Lighting Requirements

California Energy Commission

March 2024



Agenda

- 2022 Energy Code basics
- Multifamily requirements
 - Administrative
 - Mandatory
 - Prescriptive
 - Additions and alterations
- Resources



2022 Energy Code Basics



Energy Code History

Warren-Alquist Act established CEC in 1974

- Authority to develop and maintain Building Energy Efficiency Standards (Energy Code)
- Requires CEC to update periodically, usually every 3 years
- Requires Energy Code to be cost-effective over economic life of building

WARREN-ALQUIST ACT

Warren-Alquist
State Energy Resources
Conservation and
Development Act

Public Resources Code
Section 25000 et seq.



CALIFORNIA
ENERGY COMMISSION
Gavin Newsom, Governor

2022 EDITION
JANUARY 2022
CEC-140-2022-001



2022 Energy Code Goals

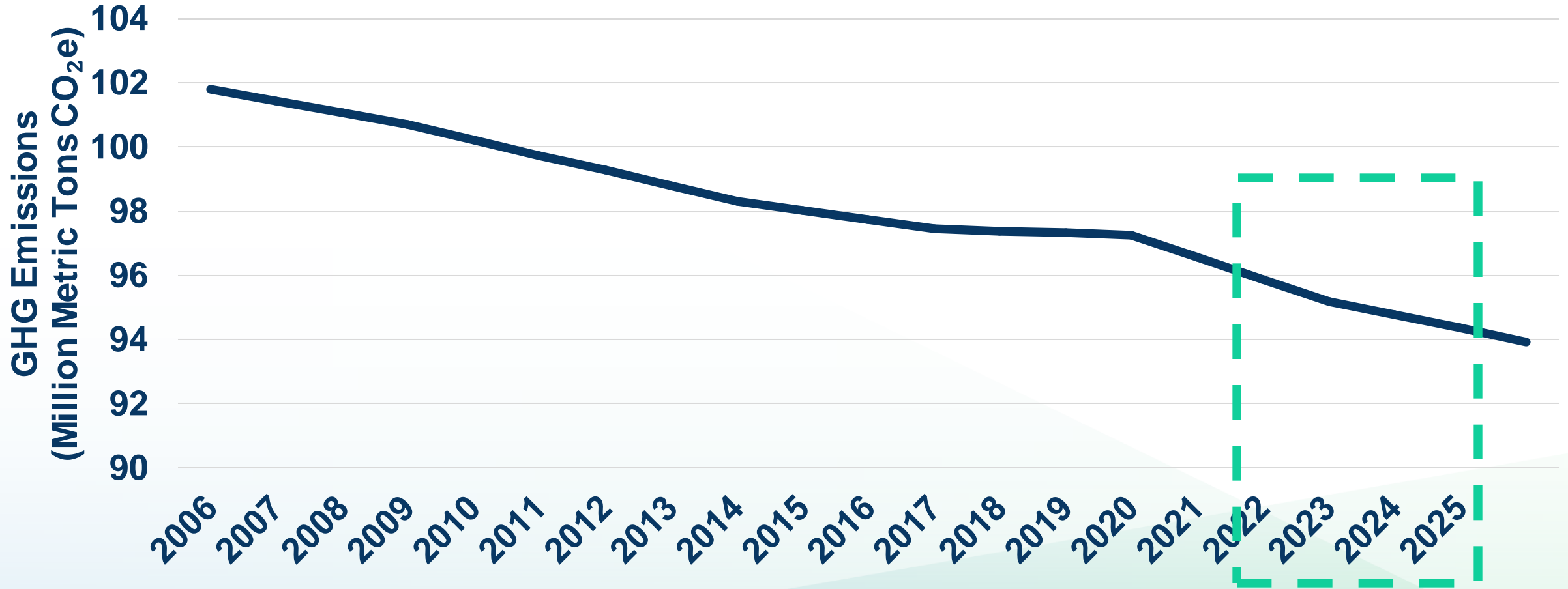
- Increase building energy efficiency cost-effectively
- Contribute to California's greenhouse gas (GHG) reduction goals
- Enable pathways for all-electric buildings
- Reduce residential building impacts on the electricity grid
- Promote demand flexibility and self-utilization of photovoltaic (PV)
- Provide tools for local government reach codes





Energy Code Environmental Benefit

Reduced Statewide Emissions



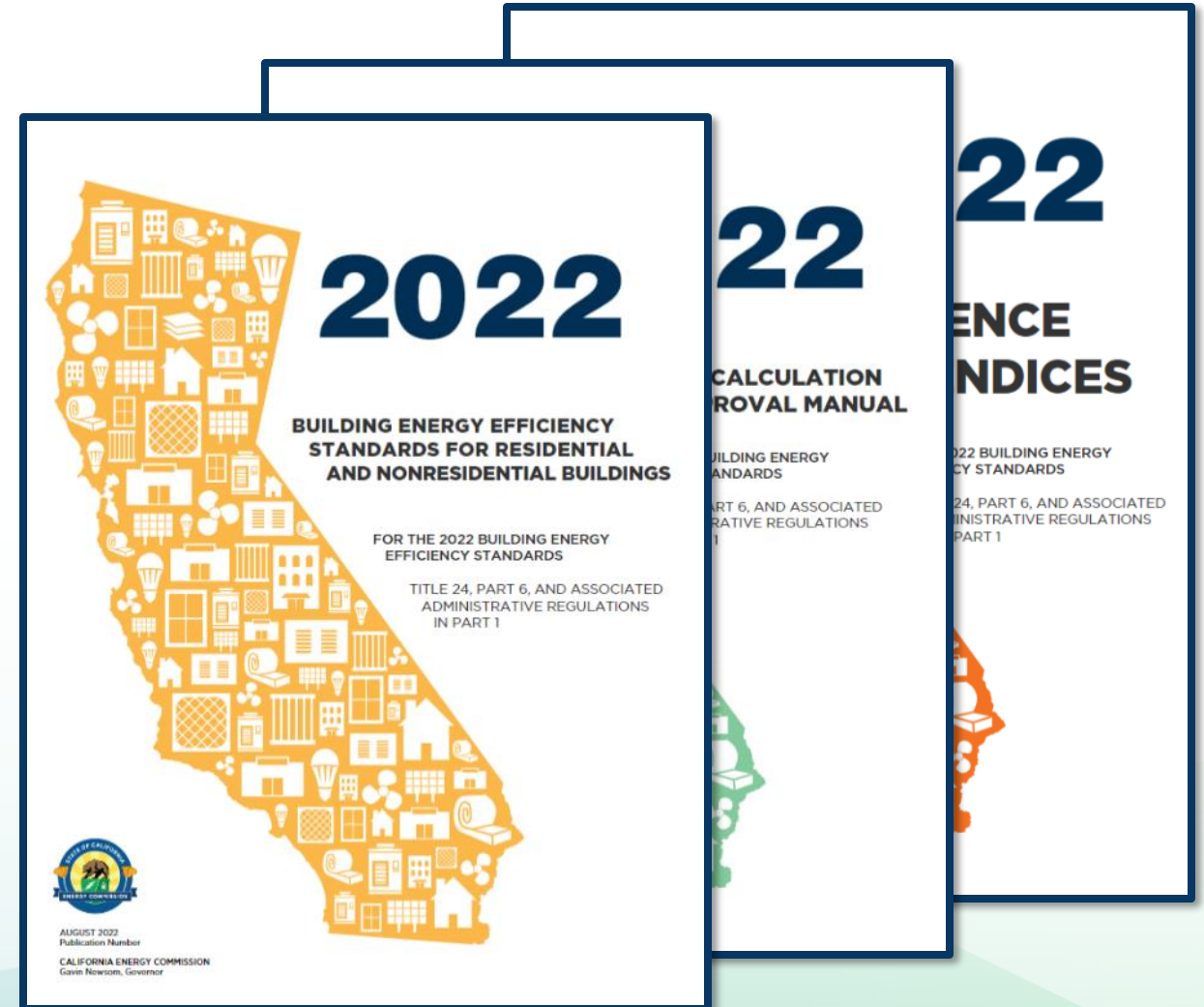
Source: CEC Impact Analysis 2005, 2008, 2013, 2016, 2019, 2022



2022 Energy Code

Effective January 1, 2023

- Building permit applications submitted on or after Jan 1, 2023
- Must use 2022 tools
 - Software
 - Forms





2022 Documents Online

2022 Building Energy Efficiency Standards

The Building Energy Efficiency Standards (Energy Code) apply to newly constructed buildings, additions, and alterations. They are a vital pillar of California's climate action plan. The 2022 Energy Code will produce benefits to support the state's public health, climate, and clean energy goals.

The California Energy Commission (CEC) updates the Energy Code every three years. On August 11, 2021, the CEC adopted the 2022 Energy Code. In December, it was approved by the California Building Standards Commission for inclusion into the California Building Standards Code. The 2022 Energy Code encourages efficient electric heat pumps, establishes electric-ready requirements for new homes, expands solar photovoltaic and battery storage standards, strengthens ventilation standards, and more. Buildings whose permit applications are applied for on or after January 1, 2023, must comply with the 2022 Energy Code.



2022 Energy Code for Residential and Nonresidential Buildings

[2022 ENERGY CODE >](#)

Expand All

- Supporting Documents – Appendices, Compliance Manuals, and Forms +
- Software – Compliance Software, Manuals, and Tools +

BUILDING ENERGY EFFICIENCY STANDARDS - TITLE 24

- 2025 Building Energy Efficiency Standards
- 2022 Building Energy Efficiency Standards** ^
 - Workshops, Notices, and Documents
- 2019 Building Energy Efficiency Standards
- 2016 Building Energy Efficiency Standards
- Past Building Energy Efficiency Standards
- Climate Zone tool, maps, and information supporting the California Energy Code
- Online Resource Center
- Solar Assessment Tools

RELATED LINKS

Workshops, Notices, and Documents

CONTACT

[Building Energy Efficiency Standards - Title 24](#)

Toll-free in California: 800-772-3300
Outside California: 916-654-5106

SUBSCRIBE

Building Energy Efficiency Standards

Email *

SUBSCRIBE

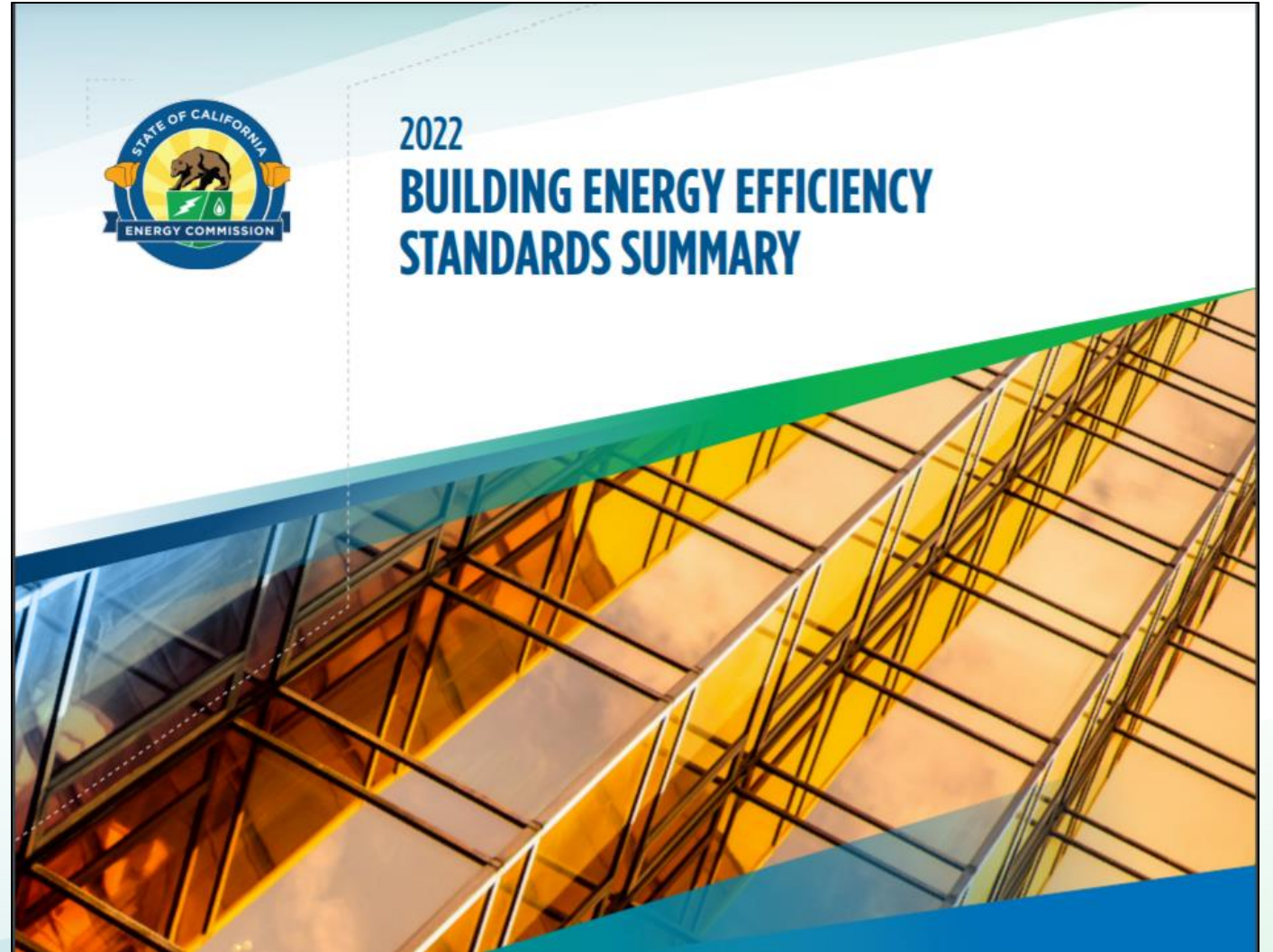
- Energy Code
- Reference Appendices
- Compliance Manuals
- Software
- Forms





2022 Energy Code Highlights

- Heat pump baselines
- Solar and battery storage
- Ventilation requirements
- Lighting
- Multifamily restructuring





Energy Code Requirements

Mandatory requirements

- Minimum efficiency requirements must always be met.
- Can never trade off

Prescriptive requirements

- Predefined efficiency requirements
- May supersede mandatory requirements
- Different requirements for newly constructed buildings, additions, and alterations



Compliance Approaches

Prescriptive approach

- Simple approach, no trade-offs
- Defines the standard building design
- 2022 heat pump baselines

Performance approach

- Most flexible approach, allows for trade-offs
- Must meet all mandatory requirements
- Requires the use of CEC-approved software
- Proposed building design meets or exceed standard building design





2022 Performance Metrics

New for 2022

Source energy performance calculations

- Nonresidential and multifamily
 - Hourly source energy
 - TDV Efficiency
 - TDV Total
 - Efficiency, PV + battery



Demonstrating Compliance

- **Compliance forms confirm Energy Code is met**
- Completed by responsible party
 - Designers, consultants, builders, contractors, technicians, HERS raters, etc.
- Submitted to enforcement agencies for verification

Updated for 2022

Type of form	Single-family	Multifamily 3 or less habitable stories	Nonresidential Multifamily 4 or more habitable stories
Certificate of compliance	CF1R	LMCC	NRCC
Certificate of installation	CF2R	LMCI	NRCI
Certificate of verification	CF3R	LMCV	NRCV
Certificate of acceptance	-	-	NRCA



Forms Registration and Certification

All Buildings § 10-103

Updated for 2022

Multifamily buildings 3 or fewer habitable stories

- When HERS verification is required all LMCC, LMCI, and LMCV forms must be registered with HERS provider data registry

Multifamily buildings 4 or more habitable stories

- NRCV must be registered with HERS provider when required
- When lighting or mechanical acceptance test is required all NRCC, NRCI, and NRCA forms must be recorded with ATTCP



2022 Compliance Software

Performance approach must use approved compliance software versions

- Nonresidential and multifamily
 - CBECC 2022.3.0
 - EnergyPro 9.2
 - IES 2.0



Administrative Requirements



10-114 Outdoor Lighting Zones

Lighting zones determine outdoor lighting power allowances: lowest in LZ0, highest in LZ4.

Prevents over-lighting of outdoor areas:

- Reduces glare
- Reduces light pollution
- Saves energy



10-114 Outdoor Lighting Zones Continued

Descriptions (see Table 10-114-A):

- LZ0 (Very Low) – Undeveloped areas of government designated parks, recreation areas, and wildlife preserves
- LZ1 (Low) – Rural areas
- LZ 2 (Moderate) – Urban clusters
- LZ3 (Moderately high) – Urban areas
- LZ4 (High) - None



Table 10-114-A

TABLE 10-114-A LIGHTING ZONE CHARACTERISTICS AND RULES FOR AMENDMENTS BY LOCAL JURISDICTIONS

TABLE 10-114-A LIGHTING ZONE CHARACTERISTICS AND RULES FOR AMENDMENTS BY LOCAL JURISDICTIONS

Zone	Ambient Illumination	State wide Default Location	Moving Up to Higher Zones	Moving Down to Lower Zones
LZ0	Very Low	Undeveloped areas of government designated parks, recreation areas, and wildlife preserves.	Undeveloped areas of government designated parks, recreation areas, and wildlife preserves can be designated as LZ1 or LZ2 if they are contained within such a zone.	Not applicable
LZ1	Low	Rural areas, as defined by the 2010 U.S. Census. These areas include: single or dual family residential areas, parks, and agricultural zone districts, developed portion of government designated parks, recreation areas, and wildlife preserves. Those that are wholly contained within a higher lighting zone may be considered by the local government as part of that lighting zone.	Developed portion of a government designated park, recreation area, or wildlife preserve, can be designated as LZ2 or LZ3 if they are contained within such a zone. Retail stores, located in a residential neighborhood, and rural town centers, as defined by the 2010 U.S. Census, can be designated as LZ2 if the business operates during hours of darkness.	Not applicable.
LZ2	Moderate	Urban clusters, as defined by the 2010 U.S. Census. The following building types may occur here: multifamily housing, mixed use residential neighborhoods, religious facilities, schools, and light commercial business districts or industrial zoning districts.	Special districts within a default LZ2 zone may be designated as LZ3 or LZ4 by a local jurisdiction. Examples include special commercial districts or areas with special security considerations located within a mixed-use residential area or city center.	Special districts may be designated as LZ1 by the local jurisdiction, without any size limits.
LZ3	Moderately High	Urban areas, as defined by the 2010 U.S. Census. The following building types may occur here: high intensity commercial corridors, entertainment centers, and heavy industrial or manufacturing zone districts.	Special districts within a default LZ3 may be designated as a LZ4 by local jurisdiction for high intensity nighttime use, such as entertainment or commercial districts or areas with special security considerations requiring very high light levels.	Special districts may be designated as LZ1 or LZ2 by the local jurisdiction, without any size limits.
LZ4	High	None.	Not applicable.	Not applicable.

NOTE: Authority: Sections 25402 and 25402.1, Public Resources Code. Reference: Sections 25007, 25008, 25218.5, 25310, 25402, 25402.1, 25402.4, 25402.5, 25402.8, and 25943, Public Resources Code.



Mandatory Requirements





160.5(a)3 Outdoor Lighting Control Requirements

In addition to requirements of Section 160.5(a)1 luminaires that provide residential outdoor lighting shall meet:

- A. Outdoor lighting attached to a building and controlled separately from the inside of a dwelling unit requires:
 - i. control by a manual ON and Off switch that permits ii or iii:
 - ii. control by a photocell and either a motion sensor or automatic time switch control; or
 - iii. Control by an astronomical time clock



110.9 Mandatory Requirements for Lighting Controls

Requirements for:

- Time-switch lighting controls
- Daylighting controls
- Dimmers
- Occupant sensing controls
- Sensors used to detect occupants
- Indicator lights

May be individual devices or systems.



§160.5(c)1 Luminaire Shielding Requirements

Outdoor luminaires 6,200 initial lumens or greater must comply with Backlight, Uplight, and Glare (BUG) requirements in accordance with Title 24, Part 11, Section 5.106.8 (Light Pollution Reduction).

See §160.5(c)1 for exceptions.



§160.5(c)2 Controls for Outdoor Lighting

- **Daylight availability** - All outdoor lighting must be controlled by one of the following:
 - Photo control
 - Astronomical time-switch control
 - Other control capable of automatically shutting off outdoor lighting when daylight is available.
- **Automatic scheduling** – All outdoor lighting must be equipped with controls that are capable of:
 - Reducing outdoor lighting power by 50% - 90%
 - Turning lighting off during scheduled unoccupied periods
 - Allowing to schedule at least two nighttime periods with independent lighting levels



§160.5(c)2 Controls for Outdoor Lighting Continued

- **Motion sensing controls required for:**
 - Outdoor luminaires other than those providing Building Façade, Ornamental Hardscape, Outdoor Dining, or Outdoor Sales Frontage lighting, where the bottom of the luminaire is mounted 24 feet above grade or lower.
 - Bilaterally symmetric outdoor wall mounted luminaires (wall packs) providing Building Façade, Ornamental Hardscape, or Outdoor Dining lighting that are mounted 24 feet above grade or lower.



§160.5(c)2 Controls for Outdoor Lighting Cont.

- **Motion sensing controls must be capable of:**
 - Reducing lighting power of each controlled luminaire by 50 – 90%.
 - Separately turning luminaire off during unoccupied periods.
 - Reducing lighting to dim or off state no longer than 15 minutes after the area has been vacated, and returning the lighting to its on state when the area becomes occupied.
- **No more than 1,500 watts of lighting power may be controlled by a single sensor or as a single zone.**



160.5(c)2 Controls for Outdoor Lighting Cont.

- **Exceptions to lighting control requirements:**
 - Outdoor lighting not permitted by a health or life safety statute, ordinance, or regulation to be turned off or reduced.
 - Lighting in tunnels required to be illuminated 24 hours per day and 365 days per year.
- **Exceptions to motion sensing control requirements:**
 - Luminaires with maximum rated wattage of 40 watts each.
 - Applications listed as Exceptions to §140.7(a).
 - Lighting subject to a health or life safety statute, ordinance, or regulation may have a minimum time-out period longer than 15 minutes or a minimum dimming level above 50 percent when necessary to comply with the applicable law.



160.5(e) Acceptance and Installation Certificate Requirements

Acceptance testing required for outdoor lighting controls as described in NA7.6 and NA7.8. Multifamily common use areas shall comply with Sections(160.5(e)1 through 160.5(e)3:

- 1.Lighting control acceptance requirements. Prior to permit granted, indoor and outdoor lighting controls shall comply with Section 160.5(b)4D, 160.5(b)4C, 160.5(b)4E, 160.5(c)2 or 1700.2(e)Aiiij.
- 2.Lighting control installation certificate requirements. An Installation Certificate shall be submitted in accordance with Section 10-103(a).
- 3.The acceptance testing in accordance with Section 160.5(e) shall be performed by a Certified Lighting Controls Acceptance Test Technician (CLCATT).



Prescriptive Requirements





170.2(e)6A General Description

A multifamily or mixed occupancy outdoor lighting installation complies with the outdoor lighting requirements if the installed lighting power is \leq the allowed outdoor lighting power calculated under §170.2(e)6D.

The allowed outdoor lighting power shall be calculated according to the outdoor lighting zone from title 24, Part 1, §10-114.

See §170.2(e)6A for exceptions.:

When 50 percent or more of the light from a luminaire falls in one or more of the following Exceptions to Section 170.2(e)6A, the lighting power shall be exempt from Section 170.2(e)6 I, ii, iii, iv, v, vi, vii, viii, ix, xi, and xii.



170.2(e)6B Outdoor Lighting Power Tradeoffs

The general hardscape lighting allowance may be traded to specific applications if the hardscape area from which the allowance is traded continues to be illuminated.

Additional lighting power allowances for specific applications may not be traded between specific applications, or to hardscape lighting.

Lighting power allowances may not be traded between outdoor and indoor areas.



§170.2(e)6D Calculation of Allowed Lighting Power

Allowed lighting power is the combined total of the sum of the general hardscape lighting allowance determined in accordance with §170.2(e)2Di, and the sum of the additional lighting power allowance for specific applications determined in accordance with §170.2(e)6Dii.

- i. §170.2(e)6Di describes how to calculate the general hardscape lighting power allowance.
 - a. General hardscape area of the site shall be included
 - b. Determine the Initial Wattage Allowance (IWA) Table 170.2-R
 - c. The hardscape lighting allowance shall be the sum of allowed watts..
- i. Additional lighting power for specific applications is the smaller of the additional lighting allowances for specific allowances per Table 170.2-S, or the actual installed lighting power meeting the requirements for the allowance.



§170.2(e)6D Calculation of Allowed Lighting Power Cont.

TABLE 170.2-R GENERAL HARDSCAPE MULTIFAMILY LIGHTING POWER ALLOWANCE

Type of Power Allowance	Lighting Zone 0 ²	Lighting Zone 1 ²	Lighting Zone 2 ²	Lighting Zone 3 ²	Lighting Zone 4 ²
Area Wattage Allowance (AWA)	No allowance ¹	0.026 W/ft ²	0.030 W/ft ²	0.038 W/ft ²	0.055 W/ft ²
Initial Wattage Allowance (IWA)	No allowance ¹	300 W	350 W	400 W	450 W

Footnotes to TABLE 170.2-R

1 Continuous lighting is explicitly prohibited in Lighting Zone 0. A single luminaire of 15 Watts or less may be installed at an entrance to a parking area, trail head, fee payment kiosk, outhouse, or toilet facility, as required to provide safe navigation of the site infrastructure. Luminaires installed shall meet the maximum zonal lumen limits as specified in Section 160.5(c)1.

2 Narrow band spectrum light sources with a dominant peak wavelength greater than 580 nm – as mandated by local, state, or federal agencies to minimize the impact on local, active professional astronomy or nocturnal habitat of specific local fauna – shall be allowed a 2.0 lighting power allowance multiplier.



§170.2(e)6D Calculation of Allowed Lighting Power Cont.

Excerpt From Table 170.2-S

Lighting Application	Lighting Zone 0	Lighting Zone 1	Lighting Zone 2	Lighting Zone 3	Lighting Zone 4
WATTAGE ALLOWANCE PER APPLICATION. Use all that apply as appropriate.					
Building Entrances or Exits. Allowance per door. Luminaires qualifying for this allowance shall be within 20 feet of the door.	Not applicable	9 watts	15 watts	19 watts	21 watts
Primary Entrances to Senior Care Facilities Allowance per primary entrance(s) only. Primary entrances shall provide access for the general public and shall not be used exclusively for staff or service personnel. This allowance shall be in addition to the building entrance or exit allowance above. Luminaires qualifying for this allowance shall be within 100 feet of the primary entrance.	Not applicable	20 watts	40 watts	57 watts	60 watts
ATM Machine Lighting. Allowance per ATM machine. Luminaires qualifying for this allowance shall be within 50 feet of the dispenser.	Not applicable	100 watts for first ATM machine, 35 watts for each additional ATM machine.			
WATTAGE ALLOWANCE PER HARDSCAPE AREA (W/ft²). May be used for any illuminated hardscape area on the site.					
Hardscape Ornamental Lighting. Allowance for the total site illuminated hardscape area. Luminaires qualifying for this allowance shall be rated for 50 watts or less as determined in accordance with Section 160.5(b)1 and shall be post-top luminaires, lanterns, pendant luminaires, or chandeliers.	Not applicable	No Allowance	0.007 W/ft ²	0.013 W/ft ²	0.019 W/ft ²
WATTAGE ALLOWANCE PER SPECIFIC AREA (W/ft²). Use as appropriate provided that none of the following specific applications shall be used for the same area.					
Building Facades. Only areas of building façade that are illuminated shall qualify for this allowance. Luminaires qualifying for this allowance shall be aimed at the façade and shall be capable of illuminating it without obstruction or interference by permanent building features or other objects. This allowance calculation shall not include portions of the building facades within 20 feet of residence bedroom windows.	Not applicable	No Allowance	0.100 W/ft ²	0.170 W/ft ²	0.225 W/ft ²
Canopies and Tunnels. Allowance for the total area within the drip line of the canopy or inside the tunnel. Luminaires qualifying for this allowance shall be located under the canopy or tunnel.	Not applicable	0.057 W/ft ²	0.137 W/ft ²	0.270 W/ft ²	0.370 W/ft ²



Additions and Alterations





180.2(b)4v – Alterations - Lighting

v. Alterations to existing outdoor lighting systems in a lighting application listed in Table 170.2-R or 170.2-S shall meet the applicable requirements of Sections 160.5(b)1, 160.5(b)2, 160.5(b)3, 160.5(c)1 and 160.5(e), and:

a. In alterations that increase the connected lighting load, the added or altered luminaires shall meet the applicable requirements of Section 160.5(c)2 and the requirements of Section 170.2(e)6 for general hardscape lighting or for the specific lighting applications containing the alterations; and

b. In alterations that do not increase the connected lighting load, where 10 percent or more of the existing luminaires are replaced in a general hardscape or a specific lighting application, the alterations shall meet the following requirements:

I. Parking and outdoor sales lots where the bottom of the luminaire is mounted less than 24 feet above the ground, replacement luminaires shall comply with Sections 160.5(c)2A & 2C

II. Parking and outdoor sales lots where the bottom of the luminaire is mounted more than 24 feet above the ground, replacement luminaires shall comply with Sections 160.5(c)2A and either comply with Section 160.5(c)2B or be controlled by lighting control systems, including motion sensors, that automatically reduce lighting power by at least 40 percent in response to the area being vacated of occupants; and

c. In alterations that do not increase the connected lighting load, where 50 percent or more of the existing luminaires are replaced in general hardscape or a specific application, the replacement luminaires shall meet the requirements of Subsection b above and the requirements of Section 170.2(e)6 for general hardscape lighting or specific lighting applications containing the alterations.



Resources





Online Resource Center

www.energy.ca.gov/orc



Handouts

- Fact sheets
- Guides

Tools

- Checklists
- Blueprint newsletter

Training

- Presentations
- Videos

Links

- Internal resources
- External resources



New Resource Hub

Homeowners and renters

- Information about water and space heating, cooking, EV charging, incentives

Contractors

- Information about training, tools, incentives

Local government representatives

- Information about model policies, permitting, training, incentives

Links on the [Building and Home Energy Resource Hub](#)





ATTCP Program - Lighting

ATTCP Program information

Lighting Controls

- National Lighting Contractors Association of America (NLCAA)
- California Advanced Lighting Controls Training Program (CALCTP)



National Lighting Contractors
Association of America



California Advanced Lighting
Controls Training Program



Blueprint Newsletter

Energy Code quarterly newsletter

- Updates
- Clarifications
- Frequently asked questions



Issue 138 | April - June 2022

BLUEPRINT

CALIFORNIA ENERGY COMMISSION
EFFICIENCY DIVISION

IN THIS ISSUE

- 2022 Energy Code: Multifamily Summary
- 2022 Energy Code: Compliance Software
- 2019 Energy Code: HERS Verifications
- Q&A
 - Solar PV for Multifamily Buildings
 - Multifamily Water Heating
 - Multifamily Common Use Areas

2022 Energy Code: Multifamily Summary

The 2022 Building Energy Efficiency Standards (Energy Code) reorganizes low-rise (three or fewer habitable stories) and high-rise (four or more habitable stories) multifamily buildings into one building type, updates the multifamily buildings definition in § 100.1, and moves all requirements for multifamily buildings to §§ 160.0-180.4. This and other significant changes include:

Mandatory Requirements

- Updates minimum efficiencies for HVAC equipment; adds minimum efficiency requirements for dedicated outdoor air systems (DOAS), heat pump, and heat recovery chiller packages. § 110.2
- Changes demand responsive lighting controls trigger to 4,000 watts or more; adds requirements for controlled receptacles. §§ 110.12, 160.5(b)4E

- Unifies envelope insulation, vapor retarder, and fenestration requirements. § 160.1
- For dwelling units
 - Adds requirements for central fan integrated ventilation systems requiring a motorized controlled damper, damper controls, and variable ventilation. § 160.2(b)2Aii
 - Requires vented kitchen range hoods ventilation rates or capture efficiencies based on conditioned floor area and fuel type per Tables 160.2-E, F, G. § 160.2(b)2Avic2
 - Requires a HERS-verified maximum fan efficacy of 1.0 Watts per cfm for heat recovery ventilation (HRV) and energy recovery ventilation (ERV) systems. § 160.2(b)2Biii
 - Adds mechanical acceptance testing requirements. § 160.3(d)2
 - Adds electric-ready requirements when gas equipment is installed for space heating, cooking, and clothes dryers. § 160.9(a-c)

For additional help with the Energy Code see Energy Code Ace's **online offerings** of trainings, tools, and resources.



Stay Connected

Receive Energy Code updates

- [Subscribe to Efficiency Division emails](#)
 - Appliances
 - Blueprint
 - Building Standards
- Respond to confirmation email

Follow the California Energy Commission





Energy Code Hotline



Monday through Friday

- 8:00 a.m. to 12:00 p.m.
- 1:00 p.m. to 4:30 p.m.

Call

- 800-772-3300 in CA
- 916-654-5106 outside CA

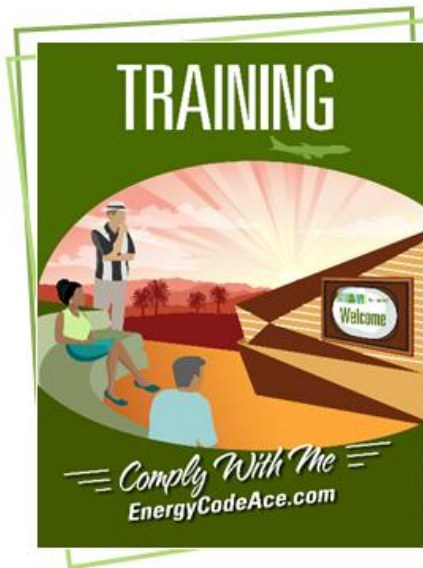
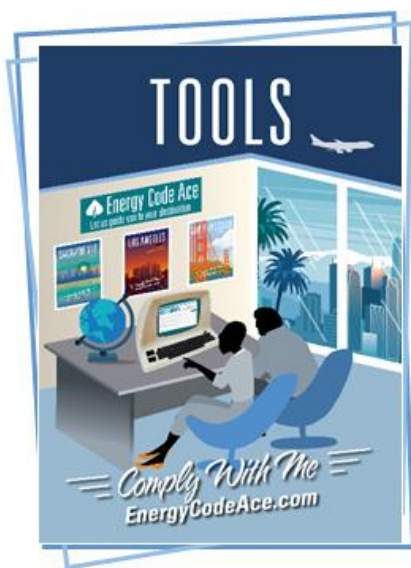


Email

- Title24@energy.ca.gov



Energy Code Ace



- Tools help automate tasks:**
- ✦ Energy Code Product Finder
 - ✦ Forms Ace
 - ✦ Image Ace
 - ✦ Navigator Ace
 - ✦ Nonres. Indoor Lighting Wheel
 - ✦ Q&Ace
 - ✦ Reference Ace
 - ✦ Timeline Ace
 - ✦ Virtual Compliance Assistant

- Training is activity based and delivered in a variety of formats:**
- ✦ Live Online instructor-led
 - ✦ Recorded webinars
 - ✦ Online self-study
 - ✦ YouTube — live streaming & videos

- Resources provide quick, useful guidance:**
- ✦ Fact Sheets
 - ✦ Checklists
 - ✦ Application Guides
 - ✦ Submit a Question
 - ✦ Trigger Sheets
 - ✦ Useful Links

Join us at EnergyCodeAce.com



3C-REN

The image shows a screenshot of the 3C-REN website. At the top left is the 3C-REN logo. To its right is a navigation menu with four items: "ABOUT 3C-REN", "HOME ENERGY SAVINGS", "BUILDING PERFORMANCE TRAINING", and "ENERGY CODE CONNECT". A search icon is located to the right of the menu. Below the navigation is a large banner image of a mountain range. Overlaid on the bottom of the banner is the text: "3C-REN (Tri-County Regional Energy Network) reduces energy use in our region's buildings for a more affordable, healthy, resilient and sustainable community." Below the banner are three columns of content. The first column is titled "HOME ENERGY SAVINGS" and includes the subtext "Save energy and improve your property" and a "Start Saving Today!" button. The second column is titled "BUILDING PERFORMANCE TRAINING" and includes the subtext "Develop your skills in building performance" and a "Find a Course" button. The third column is titled "ENERGY CODE CONNECT" and includes the subtext "Personalized coaching and educational events to simplify the energy code" and a "Submit Your Inquiry" button.

3C-REN

[ABOUT 3C-REN](#) [HOME ENERGY SAVINGS](#) [BUILDING PERFORMANCE TRAINING](#) [ENERGY CODE CONNECT](#)

3C-REN (Tri-County Regional Energy Network) reduces energy use in our region's buildings for a more affordable, healthy, resilient and sustainable community.

HOME ENERGY SAVINGS
Save energy and improve your property
[Start Saving Today!](#)

BUILDING PERFORMANCE TRAINING
Develop your skills in building performance
[Find a Course](#)

ENERGY CODE CONNECT
Personalized coaching and educational events to simplify the energy code
[Submit Your Inquiry](#)



BayREN

A screenshot of the BayREN website homepage. The page features a green navigation bar with links: "» HOW TO GET STARTED", "» FIND A CONTRACTOR", "» FIND AN ASSESSOR", and "» PARTNER WITH US". A search bar is located in the top right corner. The main content area is a large image of a park with a playground and people sitting at tables. A dark purple circular overlay on the right side of the image contains the text "Score big with smart energy upgrades." and "Upgrade your multifamily building and earn cash back — starting at \$750/unit." with a "Learn More" button. The left sidebar contains the BayREN logo and navigation links: "REBATES & FINANCING", "HOME LEARNING CENTER", "EVENTS & TRAINING", "LOCAL GOVERNMENT RESOURCES", and "ABOUT". Social media icons for Facebook, LinkedIn, Twitter, Instagram, and YouTube are at the bottom of the sidebar.

BAYREN
Local Governments Empowering Our Communities

» HOW TO GET STARTED » FIND A CONTRACTOR » FIND AN ASSESSOR » PARTNER WITH US

Search

REBATES & FINANCING

HOME LEARNING CENTER

EVENTS & TRAINING

LOCAL GOVERNMENT RESOURCES

ABOUT

f in t i y

Score big with smart energy upgrades.

Upgrade your multifamily building and earn cash back — starting at \$750/unit.

Learn More



Inland Regional Energy Network (I-REN)



iren.gov
info@iren.gov

Codes and Standards

Training and Education Program

- Free ICC-approved training sessions for 2022 Energy Code (Title 24, Part 6) requirements → www.iren.gov/161/CS-Trainings
- Requested training courses can also be scheduled

C&S Technical Support Program

Request Free Technical Assistance from Local Code Experts—Reach Code Development, Permit Guides, Etc. → www.iren.gov/162/CS-Technical-Support

Ask a Code Mentor an Energy Code Question

Submit queries online and receive a personalized response addressed by energy code experts within two business days! → www.iren.gov/162/CS-Technical-Support



Coachella Valley Association of Governments (CVAG)
San Bernardino Council of Governments (SBCOG)
Western Riverside Council of Governments (WRCOG)

* Not affiliated with, or endorsed by, the CEC



Thank you