2019 ENERGY CODE TRAINING

Do you want to learn more about the 2019 Building Energy Efficiency Standards (Energy Code)? The California Energy Commission’s Building Standards Outreach and Education (O&E) Unit is available to provide training at no charge. The O&E Unit can provide sessions that range from one-hour general or topic specific presentations, to full-day sessions. We are an International Code Council (ICC) Preferred Provider, and can offer continuing education units for attendees. If you would like to schedule a training session at your location, email Title24@energy.ca.gov.

Are you looking for a webinar training to attend online? Consider the training options from our partner Energy Code Ace or a training offered by one of your local utilities. No matter which training option you choose, we want to make sure you are getting the information you need for the upcoming 2019 Energy Code.

The 2019 Energy Code documents are available here.

Subscribe to the Blueprint Newsletter for more information on the upcoming 2019 Energy Code requirements.
NEW VIDEOS FOR NONRESIDENTIAL HVAC PRESCRIPTIVE REQUIREMENTS

New educational videos are now available on the Online Resource Center (ORC). These videos provide an overview of the 2016 Energy Code prescriptive requirements for HVAC systems in nonresidential, high-rise residential, hotel and motel buildings. To view the videos listed below, please visit the ORC.

Prescriptive Requirements for Nonresidential Space Conditioning Systems

» Course 2A: Prescriptive Approach Overview
» Course 2BC: Size, Equipment Selection and Calculations
» Course 2D: Power Consumption of Fans
» Course 2EFN: Space Conditioning Systems Controls
» Course 2G: Electric Resistance Heating
» Course 2H: Heat Rejection Systems
» Course 2IJ: Water Chillers
» Course 2K: Hydronic System Measures
» Course 2L: Air Distribution Duct Leakage Sealing
» Course 2M: Fan Control
» Course 2O: Economizers
» Course 2P: Performance Approach Overview
» Course 2Q: Additions and Alterations

WHOLE HOUSE FAN COMPLIANCE FOR LOW-RISE RESIDENTIAL BUILDINGS

Installing and using a whole house fan (WHF) can be an effective way to cool a home through ventilation cooling. Ventilation cooling uses high volumes of outdoor air to cool the indoor space instead of air conditioning. Section 150.1(c)12 of the 2016 Energy Code covers the prescriptive requirements for ventilation cooling. It requires the installation of a WHF in newly constructed single-family buildings in climate zones 8 through 14. These prescriptive requirements also apply to additions with greater than 1,000 ft² of conditioned floor area (CFA) to existing single-family buildings within the same climate zones.

To comply with the 2016 Energy Code, the following criteria for WHF installations must be met:

- Provide at least 1.5 cubic feet per minute (CFM) of air flow for each square foot of CFA by one or more WHFs; and
- Provide at least 1 ft² of attic vent free area for each 750 CFM of WHF air flow, or the manufacturer’s specified attic vent free area, whichever is greater; and
- Provide the homeowner a one-page “How to Operate Your Whole House Fan” informational sheet; and
- WHFs must be listed in the Energy Commission’s Modernized Appliance Efficiency Database System (MAEDbS).

For more information on these requirements, see Section 4.7.10 of the 2016 Residential Compliance Manual.
Q&A

TOWNHOUSES VS. DUPLEXES

Is there any difference in classification between a duplex with stacked dwelling units and a duplex with side-by-side dwelling units in the 2016 Energy Code?

No. The Energy Code classifies all group R-3 occupancy buildings with any number of stories, including duplexes, as low-rise residential. The 2016 California Building Code (Title 24, Part 2) classifies buildings that do not contain more than two dwelling units as a group R-3 occupancy. The enforcement agency has the final authority on classifying the occupancy for all buildings.

Since a townhouse has shared walls and no shared ceilings or floors, are side-by-side duplexes also considered townhouses?

No. A duplex is not considered a townhouse. The 2016 Energy Code defines townhouses as having three or more attached dwelling units. Duplexes are only two units, which can be either stacked or side-by-side, while townhouses are only side-by-side.

Are all duplex buildings, regardless of the configuration or the number of habitable stories, modeled as two separate single-family low-rise buildings?

Yes. All duplexes are modeled as two separate single-family buildings using Energy Commission approved compliance software for residential buildings. For more on how to model low-rise residential buildings, see the CBECC-Res 2016 User Manual.

Are low-rise residential townhouse dwelling units modeled as individual single-family buildings?

Yes. Low-rise residential townhouses are modeled as individual single-family units. For more on modeling low-rise residential buildings, see the CBECC-Res 2016 User Manual.

Are high-rise residential townhouse buildings modeled as multi-family buildings?

Yes. High-rise residential townhouses are modeled as one multi-family building using Energy Commission approved compliance software for nonresidential buildings. For more on how to model high-rise residential buildings, see the CBECC-Com 2016 User Manual.

Need Help? Energy Standards Hotline
(800) 772-3300 (toll-free in CA)
Title24@energy.ca.gov

FOR MORE INFORMATION

Online Resource Center:
https://www.energy.ca.gov/title24/orc/

Home Energy Rating System:
http://www.energy.ca.gov/HERS/

Acceptance Test Technician Certification Provider Program:
http://www.energy.ca.gov/title24/attcp/

Approved Compliance Software:
http://www.energy.ca.gov/title24/2016standards/2016_computer_prog_list.html

The Energy Commission welcomes your feedback on Blueprint. Please contact the editor at: Title24@energy.ca.gov

EDITOR

Amie Brousseau

SPECIAL THANKS

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• Payam Bozorgchami
• Peter Strait
• Todd Ferris
The California Statewide Codes & Standards Program
Here to help you meet the requirements of Title 24, Part 6 and Title 20
We offer NO-COST
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• Tools
• Resources
All designed to improve compliance with California’s building and appliance energy efficiency standards and lock in long-term energy savings.

EnergyCodeAce.com
Classes added frequently. Please check EnergyCodeAce.com/training for all our up-to-date offerings.

Unless otherwise noted, all Title 24, Part 6 courses are on the 2016 code.

<table>
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<th>LOCATION</th>
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<td>February 19 • 8:30 - 4:30</td>
<td>Glendale</td>
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Nonresidential Standards for Plans Examiners and Building Inspectors ✪

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<td>May 1 • 11:30 - 12:45</td>
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Nonresidential Standards for Architects ✪

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Software Training

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<td>March 13 • 1:00 - 4:00</td>
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<td>October 2 • 8:30 - 12:00</td>
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Advanced EnergyPro - Residential ✪

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Advanced EnergyPro - Nonresidential ✪

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<td>May 7 • 8:30 - 4:30</td>
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## Virtual Classroom

Delivered online in real-time by an instructor. Check EnergyCodeAce.com for registration information.

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<td><strong>Introduction to Nonresidential Modeling</strong> ◆</td>
<td>November 25 • 9:00 - 12:00</td>
<td>Online Martyn Dodd</td>
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<td><strong>Nonresidential Standards for Energy Consultants</strong> ◆</td>
<td>October 29 - 31 • 9:00 - 12:00</td>
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<td>October 15 - 17 • 9:00 - 12:00</td>
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<td>October 15 • 9:00 - 12:00</td>
<td>Online Martyn Dodd &amp; Ted Tiffany</td>
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<td><strong>Residential Modeling Tips</strong> ◆</td>
<td>October 21 • 9:00 - 12:00</td>
<td>Online Martyn Dodd</td>
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## Workshop

Virtual workshops: “roll-up-your-sleeves” interactive sessions delivered online in real-time by an instructor. Check EnergyCodeAce.com for registration information.

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<td>July 15 • 9:00 - 12:00</td>
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<td>Online Martyn Dodd</td>
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## Live Webinar

Delivered online in real-time by an instructor. Check EnergyCodeAce.com for information and register at pge.com/energyclasses.

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<td>December 3 • 9:00 - 11:30</td>
<td>Online Martyn Dodd</td>
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<td><strong>2019 Title 24: Where We’re Headed With the Residential Standards</strong></td>
<td>December 13 • 1:00 - 2:30</td>
<td>Online Martyn Dodd</td>
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## Self-Study

- Dynamic Nonresidential Compliance Forms
- Residential & Nonresidential Energy Efficiency Concepts ◆
- Residential & Nonresidential HERS ◆
- Residential Standards for AC Quality Installation Contractors ◆
- Residential Standards & Technology for Lighting ◆
- Residential Standards for Ventilation ◆
- Residential Standards & Technology for Building Envelope ◆
- Residential Standards & Technology for Solar Systems ◆
- Residential Standards & Technology for Heating, Ventilation & Air Conditioning ◆
- Residential Standards & Technology for Water Heating ◆
- Nonresidential Lighting Wheel
- Nonresidential Standards & Technology for Indoor Lighting Mandatory Measures ◆
- Nonresidential Standards & Technology for Indoor Lighting Prescriptive Compliance ◆
- Title 20 Essentials: The Water-Energy Nexus ◆

Take them whenever and wherever you like, at your own pace. Visit EnergyCodeAce.com
Facilitated online discussion forums for building department personnel and other industry professionals.

- Decoding 2016 Energy Standards: Let’s Talk How to Navigate
- Decoding 2016 Envelopes: Let’s Talk Res & Nonres High Performance Walls and Attics
- Decoding 2016 Forms: Let’s Talk About the NEW NRCC-LTI-E
- Decoding 2016 HERS: Let’s Talk Residential and Nonresidential HERS Measures
- Decoding 2016 HVAC: Let’s Talk Mechanical Acceptance Testing
- Decoding 2016 Title 24, Part 6: Let’s Talk About What’s New
- Decoding 2016 Title 24, Part 6: Let’s Talk Energy Code Resources
- Decoding 2016 Title 24, Part 6: Let’s Talk Nonresidential Lighting
- Decoding ADUs: Let’s Talk Recent Changes
- Decoding Attics and Walls: Let’s Talk 2016 High Performance Requirements
- Decoding CBECC-Com: Let’s Talk about the New NRCC-PRF Form
- Decoding CBECC-Com: Let’s Talk Energy Pro and Nonresidential 2D Modeling
- Decoding Comfort: Let’s Talk HVAC Impacts on Residential Comfort
- Decoding CXR: Let’s Talk Nonresidential Commissioning Under Title 24, Part 6
- Decoding Electrical Distribution: Let’s Talk Title 24, Part 6 Section 130.5
- Decoding Forms: Let’s Talk Res & Nonres 2013 Energy Compliance Forms
- Decoding HERS: Let’s Talk Res & Nonres HERS Measures
- Decoding Multifamily: Let’s Talk Low Rise and High Rise Multifamily
- Decoding QII: Let’s Talk HERS Quality Insulation Installation
- Decoding Recovery: Let’s Talk Residential Rebuilding
- Decoding Renewables: Let’s Talk PV, Solar & Energy Compliance
- Decoding Residential Compliance: Let’s Talk About Design to Construction
- Decoding Residential Lighting: Let’s Talk Title 24, Part 6 Requirements

Go to EnergyCodeAce.com for upcoming topics, dates, times and to view recorded past events.

Our new Title 20 Appliance Efficiency curriculum focuses on the essentials industry professionals and consumers need to know to use the California Energy Commission’s Modernized Appliance Efficiency Database System (MAEDBS). Access our video trainings on the following topics at: energycodeace.com/content/title-20-ondemand

- Title 20 Essentials: Making the Most of On-Demand Video Training
- Title 20 Essentials: Why Certification Matters
- Title 20 Essentials: Using MAEDBS for Manufacturers
- Title 20 Essentials: Using MAEDBS for Third Party Certifiers
- Title 20 Essentials: Using MAEDBS for Test Laboratories
- Title 20 Essentials: California Appliance Standards for Retailers, Distributors, Contractors, and Importers

Informal one-hour live stream YouTube shows designed to present “how-tos” for industry professionals.

- Code & Coffee with Brian - Residential Modeling: Simple New Construction Project
- Code & Coffee: Nonresidential Lighting - Indoor Lighting Wheel Overview
- Code & Coffee with Brian: Residential Modeling – Accessory Dwelling Units (ADU), Part 2: Newly Conditioned Attached ADU
- Code & Coffee: Residential Modeling – Existing + Addition + Alteration Project
- Code & Coffee: Residential Modeling – Townhome Project

Go to EnergyCodeAce.com for upcoming topics, dates, times and to view recorded past events.