



2025

SINGLE-FAMILY RESIDENTIAL COMPLIANCE MANUAL

FOR THE 2025 BUILDING ENERGY
EFFICIENCY STANDARDS

ENERGY CONSERVATION
MANUAL



JUNE 2025
CEC-400-2025-005

CALIFORNIA ENERGY COMMISSION
Gavin Newsom, Governor



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California Energy Commission

STAFF REPORT

2025 Single-Family Residential Compliance Manual

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2025 Energy Code Conservation Manual
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DISCLAIMER

Staff members of the California Energy Commission (CEC) prepared this manual, which is intended to provide guidance on how to comply with the 2025 Building Energy Efficiency Standards. However, use of or compliance with the guidance does not assure compliance with the 2025 Building Energy Efficiency Standards and it is the responsibility of the user of this document to ensure compliance with the 2025 Building Energy Efficiency Standards and all other applicable laws and regulations. The CEC, the State of California, its employees, contractors, and subcontractors make no warrant, express or implied, and assume no legal liability regarding the use of this manual; nor does any party represent that the uses of this information will not infringe upon privately owned rights.

ACKNOWLEDGEMENTS

The Building Energy Efficiency Standards (Energy Code) were first adopted by the California Energy Commission and put into effect in 1978, and have been updated periodically as directed by statute. The Energy Code is a unique California asset that have placed the state on the forefront of energy efficiency, sustainability, energy independence, and climate change issues. These standards also have provided a template for national standards within the United States, as well as for other countries around the globe. They have benefitted from the conscientious involvement and enduring commitment to the public good of many persons and organizations along the way.

The 2025 Energy Code development and adoption process continues a longstanding practice of maintaining the standards with technical rigor, challenging but achievable design and construction practices, public engagement, and full consideration of the views of stakeholders. The 2025 Energy Code revision and the supporting documents were updated through the work of California Energy Commission (CEC) staff and consultants working under contract to the CEC. Support was provided by the utility-organized Codes and Standards Enhancement (CASE) Initiative. Input was also gained by the participation of stakeholders and the contribution of formal public comments.

CEC Efficiency Division staff would like to acknowledge Commissioner Andrew McAllister, his adviser, Bill Pennington, Efficiency Division Director Michael Sokol, and Efficiency Division Deputy Director Will Vicent for their unwavering leadership throughout the standards development.

Staff would like to acknowledge Javier Perez, who served as project manager for the 2025 standards code cycle; Payam Bozorgchami, P.E., who served as the senior engineer and senior technical lead; Gypsy Achong, who served as manager for the Buildings Standards Branch; Mikey Shewmaker, who served as the supervisor for the Standards Development Unit; Nikhil Kapur, who served as the supervisor for the Program and Project Unit.

Staff would like to acknowledge Allan Ward, Devin Black, Josephine Crosby, Ana Gonzalez, Michael Murza, Albert Kim, Melanie Mariotti, Maya Murphy-Cook, and Isaac Serratos, who provided legal counsel and support.

Staff would like to acknowledge technical staff contributors of the Building Standards Branch, including Haider Alhabibi; Jessica Arroyo; Ronald Balneg; Stephen Becker; Amie Brousseau; Thao Chau, P.E.; Sahar Daemi; Kyle Grewing; Simon Lee, P.E; Elmer Mortel; Gagandeep Randhawa; Anushka Raut; Muhammad Saeed; Danny Tam; Trevor Thomas; RJ Wichert, P.E.; and Allen Wong, and of the Standards Compliance Branch, including Joe Loyer; Chris Olvera; and Cheng Moua, P.E. Additional staff input and assistance came from the Energy Hotline staff and the CEC's Web Team. Administrative support and editing were provided by Tajanee Ford-Whelan, and Michi Mason.

Critical support for the staff in conceptualizing, evaluating, and reviewing this document came from consultants and stakeholders, including NORESO, Bruce Wilcox, and the Codes and Standards Enhancement Initiative. The Codes and Standards Enhancement Initiative is supported by a consortium of California utility providers including the Pacific Gas and Electric

Company, Southern California Edison, San Diego Gas & Electric, Sacramento Municipal Utility District, and Los Angeles Department of Water and Power.

ABSTRACT

California's Building Energy Efficiency Standards were adopted by the California Energy Commission in 1976 and have been updated periodically as directed by statute. In 1975, the California Department of Housing and Community Development adopted rudimentary energy conservation standards under State Housing Law authority that were a precursor to the first generation of the standards. However, the Warren-Alquist Act was passed one year earlier with explicit direction to the California Energy Commission (CEC), formally titled the State Energy Resources Conservation and Development Commission, to adopt and implement the standards. The CEC's statute created separate authority and specific direction regarding what the standards are to address, what criteria are to be met in developing the Energy Code, and what implementation tools, aids, and technical assistance are provided.

The standards contain energy and water efficiency requirements (and indoor air quality requirements) for newly constructed buildings, additions to existing buildings, and alterations to existing buildings. Public Resources Code Sections 25402 subdivisions (a)-(b) and 25402.1 emphasize the importance of building design and construction flexibility by requiring the CEC to establish performance standards, in the form of an "energy budget" by building type in terms of the energy consumption per square foot of floor space.

Public Resources Code Section 25402.1 requires the CEC to support the Energy Code with compliance tools for builders and building designers. The Compliance Manuals provide information supplemental to the Energy Code regulations. The manuals are intended to help plans examiners, inspectors, owners, designers, builders, and energy consultants comply with and enforce California's Energy Code.

Keywords:

California Energy Commission; mandatory; envelope insulation; California Building Code; prescriptive; HVAC; California Building Energy Efficiency Standards; performance; building commissioning; Title 24, Part 6; valuation; refrigeration; 2025 Building Energy Efficiency Standards; ducts in conditioned spaces; exhaust; residential; high-performance attics; compressed air; nonresidential; high-performance walls; acceptance testing; newly constructed; high-efficacy lighting; data collection; additions and alterations to existing buildings; water heating; cool roof; windows; on-site renewable; 2025 Energy Code; indoor air quality; field verification and diagnostic testing; swimming pool; photovoltaic; PV; battery; solar ready; electric-ready

Please use the following citation for this report:

Bucaneg, Haile. 2025. *2025 Single-Family Residential Compliance Manual*. California Energy Commission. Publication Number: CEC-400-2025-005.