SIGNIFICANT CHANGES TO THE CALIFORNIA ENERGY CODE 2019 EDITION

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ISBN: 978-1-955636-12-4 (soft-cover edition)
ISBN: 978-1-955636-13-1 (PDF download)

Errata on various ICC publications may be available at www.iccsafe.org/errata.

First Printing: June 2021

PRINTED IN THE USA

T026502

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Preface

The purpose of *Significant Changes to the California Energy Code Code, 2019 Edition*, is to familiarize energy code professionals, building officials, fire officials, plans examiners, inspectors, design professionals, contractors, and others in the building construction industry with many of the important changes in the 2019 *California Energy Code* (CEC). This publication is designed to assist code users in identifying the specific code changes that have occurred and understanding the reasons behind the changes. It is also a valuable resource for jurisdictions in their code-adoption process.

Only a portion of the code changes to the CEC are discussed in this book. The changes selected were identified for a number of reasons, including their frequency of application, special significance, or change in application. However, the importance of the changes not included is not to be diminished. Further information on California code changes can be found in the *California Significant Code Change series,* available from the International Code Council® (ICC®). This resource series provides the published documentation for each successful code change contained in the 2019 California Building, Fire, and Residential Codes.

Significant Changes to the California Energy Code (CEC), 2019 Edition, is organized into nine parts, each representing a distinct grouping of code topics. It is arranged to follow the general layout of the CEC, including code sections and section number format. The table of contents, in addition to providing guidance in the use of this publication, allows for a quick identification of those significant code changes that occur in the 2019 CEC.

Throughout the book, each change is accompanied by a photograph or an illustration to assist in and enhance the reader's understanding of the specific change. A summary and a discussion of the significance of the change are also provided. Each code change is identified by type, be it an addition, modification, clarification, or deletion.

The code change itself is presented in a legislative format similar to the style utilized for code-change proposals. Deleted code language is shown with a strikethrough, whereas new code text is indicated by underlining. As a result, the actual 2019 code language is provided, as well as a comparison with the 2016 CEC language, so the user can easily determine changes to the specific code text.

As with any code-change text, *Significant Changes to the California Energy Code, 2019 Edition*, is best used as a companion to the 2019 CEC. Because only a limited discussion of each change is provided, the code itself should always be referenced in order to gain a more comprehensive understanding of the code change and its application.

The commentary and opinions set forth in this text are those of the authors and do not necessarily represent the official position of ICC. In many cases, the explanatory material is derived from the reasoning expressed by code-change proposals.

Comments concerning this publication are encouraged and may be directed to ICC at significantchanges@iccsafe.org.

About the *California Energy Code*

Building officials, design professionals, contractors and others involved in the field of building construction recognize the need for modern, up-to-date building energy codes addressing the design and installation of building systems through both prescriptive and performance requirements. The *California Energy Code* (CEC), 2019 Edition, is intended to meet these needs for residential and commercial buildings through the development and adoption of Part 6 of the California Building Standards Code that safeguard the public health, the environment, and safety in all communities, large and small. The CEC is kept up to date through California's code-development process. The provisions of the 2016 edition, along with those code changes approved through 2019, make up the 2019 edition.

The CEC is Part 6 of the California Building Standards Code, Title 24 and is published by ICC. This comprehensive code establishes minimum regulations for residential and commercial building systems by means of prescriptive and performance-related provisions. It is founded on broad-based principles that make possible the use of new materials and new building designs. The CEC is a comprehensive code containing provisions for building energy conservation and efficiency and is applicable to buildings throughout California.

Acknowledgments

Grateful appreciation is due to many ICC staff members for their generous assistance in the preparation of this publication, and to the following:

Payam Bozorgchami, P.E.	Bill Pennington	Mazi Shirakh, P.E.
Peter Strait	Todd Ferris	Larry Froess, P.E.
Simon Lee, P.E.	Jeff Miller, P.E.	Ronald Balneg
Dee Anne Ross	Michael Shewmaker	Alexis Smith
Danny Tam	RJ Wichert	Thao Chau
Allen Wong	Paula David	Jose Perez
Kevin Mouayang	Jennica Limcaco	Safa Bakhshi
Elizabeth Ferris	Hamed Amouzgar	

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Daniel Wong is a senior electrical engineer in the California Energy Commission's Standards Compliance Office. He specializes in the lighting and electrical power distribution system requirements and helps develop training, tools, and resources to assist enforcement agencies verify compliance with the California Energy Code. Daniel has been working in energy efficiency since 2011 performing research, evaluation, implementation, and outreach activities.

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Amie Brousseau is an Energy Commission Specialist in the California Energy Commission's Outreach and Education unit. She specializes in the building envelope requirements, helping to develop resources and training materials to simplify the California Energy Code. Amie is the current editor of the Blueprint newsletter. She has been working in energy efficiency for 10 years doing energy audits, benchmarking, Energy Code presentations, and outreach to stakeholders. Amie also does project and contract management.

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Kelly Morairty joined the California Energy Commission in 2016 and works as a mechanical engineer in the Building Standards Office, Outreach and Education Unit. He specializes in HVAC requirements and helps develop training, tools, and resources to assist building industry stakeholders with compliance with the California Energy Code.

Christopher Olvera

Christopher Olvera has over 17 years of experience working at the California Energy Commission. He began work as a student on the Energy Standards Hotline fielding questions from designers, builders, and enforcement agencies statewide regarding the Energy Code. At the Energy Commission, Chris has served in several other positions supporting a variety of programs, including the HERS, ATTCP, Compliance and Enforcement, Low Interest ECCA Loans, Bright Schools, and Proposition 39. Currently, Chris is the Supervisor of the Outreach and Education Unit that develops training tools, presentations, and resources to assist enforcement agencies verify compliance with the California Energy Code.

About the California Energy Commission

The California Energy Commission is the state's primary energy policy and planning agency. It has seven core responsibilities: advancing state energy policy, encouraging energy efficiency, certifying thermal power plants, investing

in energy innovation, developing renewable energy, transforming transportation, and preparing for energy emergencies. Established in 1975 by the Warren-Alquist Act to respond to the energy crisis of the early 1970s, the agency's research, programs and policies remain crucial today as the state plans for 100-percent clean energy and carbon neutrality by midcentury.

About CALBO

California Building Officials is a nonprofit corporation dedicated to promoting public health and safety in building construction through responsible legislation, education, and building code development. CALBO was founded in 1962 to promote and further the profession of the local California Building Official. With time and achievement, the organization has become the advocate and representative of not only the local California Building Official, but of local building departments, local government entities, and public safety and code enforcement officials.

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About the International Code Council®

The International Code Council is a nonprofit association that provides a wide range of building safety solutions including product evaluation, accreditation, certification, codification and training. It develops model codes and standards used worldwide to construct safe, sustainable, affordable and resilient structures. ICC Evaluation Service (ICC-ES) is the industry leader in performing technical evaluations for code compliance, fostering safe and sustainable design and construction.

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