

CALIFORNIA ENERGY COMMISSION

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Main website: www.energy.ca.gov



**2013 Building Energy Efficiency Standards,
California Code of Regulations, Title 24,
Parts 1 and 6**

**Docket No. 12-BSTD-01
Approval: 16-0902**

**APPROVAL BY THE EXECUTIVE DIRECTOR OF THE PUBLIC DOMAIN
RESIDENTIAL COMPLIANCE SOFTWARE CBECC-RES 2013-4C**

The Executive Director hereby approves CBECC-Res 2013-4c as the public domain alternative calculation method for demonstrating performance compliance with the residential provisions of the *2013 Building Energy Efficiency Standards*, California Code of Regulations, Title 24, Part 6, and associated administrative regulations in Part 1, Chapter 10 (Standards).

The Warren-Alquist State Energy Resources Conservation and Development Act, Public Resources Code sections 25000 et seq., 25402.1, subd. (b), requires the California Energy Commission to, among other things, establish a process for certifying calculation methods for demonstrating compliance with its building energy efficiency standards.

CBECC-Res 2013-4c incorporates additional functionality and corrections to the revised compliance manager that was approved by the Executive Director on January 20, 2016, 2013 Public Domain California Building Energy Code Compliance - Residential (CBECC-Res) software, Version 4b. CBECC-Res 2013-4c incorporates the following functional changes and corrections:

- Corrected internal calculations for gas-fired water heaters
- Revised number of recirculating loops in the Standard Design
- Restores the ability to model multiple water heating systems in single-family dwelling units
- Corrects special features and HERS reporting for multi-family water heating distribution systems
- Includes enhancements of HVAC system modeling to add wood heat, ductless multi-split, and ductless VRF

In approving CBECC-Res 2013-4, the Energy Commission directed the Executive Director to take all actions reasonably necessary to ensure that CBECC-Res is

maintained and revised to accurately estimate the energy use of Residential buildings and demonstrate compliance with the *2013 Building Energy Efficiency Standards*.

In addition to increasing functionality and solving concerns from the building industry, addressing these issues does not significantly affect compliance with the *2013 Building Energy Efficiency Standards*.¹ Therefore, this update is not required to be approved by the Energy Commission² and versions 4, and 4b, as well as version 4c, are valid for permit applications.

Information for obtaining CBECC-Res 2013-4c will be posted on the Energy Commission's 2013 Standards website for approved computer compliance programs: www.energy.ca.gov/title24/2013standards/2013_computer_prog_list.html.

A handwritten signature in blue ink, appearing to read 'R. P. Oglesby', is written over a horizontal line.

ROBERT P. OGLESBY
Executive Director

¹ Cal. Code Regs., Title 24, Part 1, Ch. 10, and Part 6 (also known as the California Energy Code).

² See Residential Alternative Calculation Method Approval Manual, May 2012, Pub. No. CEC-400-2012-007-CMF-REV, § 1.2.4, p. 1-3, available at: www.energy.ca.gov/2012publications/CEC-400-2012-007/CEC-400-2012-007-CMF-REV.pdf.