



**2019 Building Energy Efficiency Standards,
California Code of Regulations, Title 24,
Parts 1 and 6**

**Docket: 19-BSTD-01
Approval: 19-020420**

**APPROVAL BY THE EXECUTIVE DIRECTOR OF THE PUBLIC DOMAIN
RESIDENTIAL COMPLIANCE SOFTWARE CBECC-RES 2019.1.2**

The Executive Director hereby approves California Building Energy Code Compliance software, CBECC-Res 2019.1.2, as the public domain alternative calculation method for demonstrating performance compliance with the residential provisions of the *2019 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 (CEC) to, among other things, establish a process for certifying calculation methods for demonstrating compliance with its building energy efficiency standards.

CBECC-Res 2019.1.2 contains the following functional changes and corrections:

- Added capability to model a central heat pump water heater in multifamily buildings.
- Added variable capacity heat pump compliance option.
- Added capability to model shading on photovoltaic (PV) systems.
- Added an additional California Flexible Installation (called CFI-2) option for PV systems. CFI-2 provides a more generous range of acceptable PV locations, but because it includes azimuths closer to the north orientation, PV system performance is degraded by 10 percent.
- Improvement to solar thermal water heating.
- Corrections to XML file used by Home Energy Rating System (HERS) providers.
- Various improvements and fixes to source code.
- Various rule enhancements as needed for various bug fixes.

When CBECC-Res 2019.1.0 was approved on May 15, 2019, the CEC 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 *2019 Building Energy Efficiency Standards*.

Pursuant to the *2019 Alternative Calculation Method Approval Manual*¹, this update is not a major update to the CBECC-Res 2019.1.0 compliance manager² and it qualifies as a section 1.3.2 change. Further, this update is sufficiently minor such that third party vendors are not required to incorporate this change.

Information for obtaining CBECC-Res 2019.1.2 will be posted on the CEC's 2019 Standards website for approved computer compliance programs:

https://www.energy.ca.gov/title24/2019standards/2019_computer_prog_list.html



Drew Bohan
Executive Director

¹ See *2019 Alternative Calculation Method Approval Manual*, December 2018, Pub. No. CEC-400-2018-023-CMF, §§ 1.3.2 and 1.4.1, pp. 8-9, available at: <https://www.energy.ca.gov/2018publications/CEC-400-2018-023/CEC-400-2018-023-CMF.pdf>.

² Cal. Code Regs., Title 24, Part 1, Ch. 10, and Part 6 (also known as the California Energy Code).