

Release Notes

Version CBECC-Res 2022.2.0

October 2022

Overview

CBECC-Res is an open-source software program developed by the California Energy Commission for use in showing compliance with the 2022 Building Energy Efficiency Standards for single family residential buildings. These Release Notes are for CBECC-Res 2022.2.0 released in October 2022. This update to CBECC-Res was approved at the October 12, 2022 California Energy Commission Business Meeting and is now available for showing performance compliance with the single-family portions of the 2022 Energy Code.

Please Note: For the 2022 Standards, all multifamily buildings are included in CBECC 2022 and can no longer be analyzed in CBECC-Res.

CBECC-Res Changes since Release of 2022.1.0 (6/9/22)

- Ability to specify residential HVAC equipment using either SEER/EER/HSPF or SEER2/EER2/HSPF2 efficiency metrics.
- Revisions to HVAC simulation auto-sizing mechanisms to use updated assumptions, new CSE capabilities and design conditions derived from ASHRAE 2021 Climatic Design Information. Additional data and background information is available at <https://www.ashrae.org/technical-resources/bookstore/weather-data-center>.
- 2022 CF1R Report Updates:
 - New sections - ADU, EnergyUseIntensity, UMLH, NEEA HPWH, VCHP-Detailed, DualFuelHP, and IAQ Fans (VerifAlt).
 - Modified sections - EnergyDesignRatings and EnergyUseSummary.
- Update standard design HPWH location for homes w/ no garage.
- Replace 2019 Existing + New ducts less than 40ft classification with updated 2022 limit of 25ft.
- Alteration Analysis Updates:
 - Ceiling-below-attic constructions from R-30 to R-19 for CZs 5 & 7 and R-49 for all other CZs.
 - Duct insulation for altered or extended ducts greater than 25 feet (R-8 in CZs 1, 2, 4, and 8-16 and R-6 in others).
 - Existing CeilingBelowAttic (of existing zone) modeled w/ R-19 for CZs 5 & 7 and R-49 for others when assigned system includes Altered or New ducts.

- Altered/new electric resistance space heating replacement exceptions (Stds section 150.2(b)1G).
- fix ensuring HVAC systems of EAA models transformed from Other (non-HP) to SplitHeatPump or from HeatPump to Furnace.

- Additions Analysis Updates:
 - prevent high performance attic (below roof deck insulation) requirement on Additions ≤ 700 SqFt.
 - mod disabling New Construction standard design fuel switching and other 2022-specific compact distrib & DWHR settings for Addition Alone analysis.