## Changes from 2020 RBES to 2023 RBES

- 1. Multifamily Alignment
  - a. Aligned RBES and CBES standards for multifamily buildings to ensure that regardless of the building height, the energy standards would remain consistent
- 2. Packages
  - a. For the Package Plus Points compliance pathway, combined the base packages for Base Code and Stretch Code into a single "Standard Package" for simplicity and flexibility
- 3. Thermal Envelope Improvements
  - a. Increased insulation requirements for walls, foundations and slabs.
    - i. Require continuous insulation for walls
  - b. Reduced window U-factors from U-0.30 to U-0.27
  - c. Tighter air leakage rates from 3 ACH50 to 0.15 CFM50/Sq. Ft. of Building Shell (~2 ACH50)
    - i. Transitioning air leakage measurements from "air changes per hour (ACH) at 50 Pascals pressure" to "cubic feet per minute (CFM) at 50 Pascals pressure per square foot of building shell area of all six sides of the building"

## 4. Points

- a. Adjusted the number of required points based on house size, while recognizing the inherent higher efficiency of multifamily buildings
- b. Added additional options for points
  - i. Demand Response (DR) enabled appliances
  - ii. Higher insulation levels
  - iii. More efficient mechanical ventilation systems
  - iv. Better windows
- c. Insulation Embodied Carbon
  - i. Developed new optional points for selecting low embodied carbon insulation materials
- 5. Mechanical Ventilation
  - a. Now require an efficient, balanced whole-house ventilation system with heat or energy recovery
- 6. Electrification
  - a. Electric Vehicles (EV)
    - Included "EV Capable" requirements to ensure that it will be easy to install EV Supply Equipment in the future
  - b. Solar

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- i. Included "Solar Ready" requirements to ensure that it will be easy to install solar photovoltaic panels in the future
- c. Electric Service Panel
  - i. Require an electric service panel capable of powering the whole home or apartment will all electric end-uses
- 7. Tiny Houses
  - a. Recognized and added standards for tiny houses
- 8. Definitions
  - a. Updated and added a number of definitions
- 9. New Specific Measures
  - a. 100% LED lighting
  - b. Air-sealed electrical boxes

- c. All ducts must be placed inside the building thermal envelope
- d. Exterior lighting controls
- e. Electric meter for every unit (except affordable multifamily housing)
- f. Efficient electrical transformers
- 10. Home Energy Rating System (HERS)
  - a. Reduced (improved) HERS Index scores for Base Code (54) and Stretch Code (47)
  - b. Recognize additional HERS software tools
- 11. Additions and Alterations
  - a. Clarified that unaltered portions of buildings do not need to comply with RBES