California Energy Commission
2019 Building Energy Efficiency Standards
What's New for Nonresidential

The most significant changes in the *2019 Building Energy Efficiency Standards* for nonresidential, hotel and motel, and high-rise residential buildings are in lighting design. These and other major changes include:

Health Care Facilities

1. Extended the scope of Part 6 to healthcare facilities overseen by the California Office of Statewide Health Planning and Development (OSHPD). Several exceptions are incorporated to ensure appropriate application of the Energy Standards.

Envelope

1. Reduced the site-built fenestration requirement from 1,000 square feet to 200 square feet (§110.6, NA6).

Lighting

1. Revised and streamlined luminaire classification and wattage requirements (§130.0(c)).
2. Clarified and streamlined of manual area controls, multi-level lighting controls, and automatic daylighting controls requirements. Restrooms to comply with occupancy sensing control requirements. A new section for indoor lighting control interactions (§130.1).
3. Changed indoor and outdoor lighting power allowances based on light-emitting diode (LED) lighting technologies. Revised lighting power density (LPD) values in Table 140.6-B thru 140.6-G, and 140.7-B (§140.6 and §140.7).
4. New prescriptive requirements and power adjustment factors (PAF) for daylighting devices including horizontal slats, light shelves and clerestory fenestrations (§140.3(d) and §140.6(a)2L).
5. New lighting power adjustment for small aperture tunable-white and dim-to-warm LED luminaires (§140.6(a)4B).
6. Revised and streamlined of outdoor lighting controls requirements (§130.2(c)).
7. Added separate lighting power allowance values for concrete-surfaced and asphalt-surfaced hardscape outdoor lighting application in Table 140.7-A. (§140.7)
8. Revised and streamlined of alteration requirements, including the merging of three sections into a single "Altered Indoor Lighting Systems" section, the alignment of two reduced power options on controls, and trigger threshold of projects over 5,000 square feet. Revised and consolidated Table 141.0-F (§141.0(b)2I).

Mechanical

1. Minimum efficiency reporting value (MERV) 13, or equivalent, filters are required for heating/cooling systems for nonresidential, hotel/motel, and high-rise residential buildings. Filtration requirements extended to supply-only ventilation systems and the supply side of balanced ventilation systems (§120.1(b) and (c)).
2. New ventilation requirements for high-rise residential dwelling units (from ASHRAE 62.1 to 62.2). Must be a balanced system or a continuously operating supply or exhaust system. HERS blower door testing required for continuously operating ventilation systems (§120.1(b)).
3. Kitchen range hoods in high-rise residential dwelling units require HERS verification and acceptance testing to ensure HVI certification complies with ASHRAE 62.2 minimum airflow and sound rating requirements (§120.1(b)).
4. Incorporated natural and exhaust ventilation procedures of 2016 ASHRAE 62.1. Updated Table 120.1-A to include minimum ventilation rate for more spaces. Table 120.1-B added to list minimum exhaust rate for certain spaces (§120.1).
5. Expanded economizer FDD requirements to all cooling systems over 54,000 Btuh with an air economizer (§120.2(i)).

Covered Processes

1. Added fan efficiency and automatic sash closure requirements, including acceptance testing, for laboratory fume hoods (§140.9(c)1 and 4).
2. New efficiency and system control requirements for adiabatic condensers serving refrigerated warehouses and supermarkets (§120.6(b)).