



California Energy Commission

2022 Building Energy Efficiency Standards

What's New for Multifamily

Multifamily What's New for 2022 Summary

The 2022 Energy Code reorganizes low-rise (three or fewer habitable stories) and high-rise (four or more habitable stories) multifamily buildings into one building type, updates the multifamily buildings definition, and moves all requirements for multifamily buildings to their own subchapters under Sections 160.0-180.4.

Administrative Regulations:

- Lighting controls and mechanical systems Acceptance Test Technician Certification Providers (ATTCs) must record related Certificates of Compliance, Installation, and Acceptance Testing in an electronic database. §10-103.1(c)3H and §10-103.2(c)3H
- Outdoor lighting zones (LZ) updated and rural areas moved to LZ1 and urban clusters added to LZ2. Building types added to state defaults, and notification requirements for LZ amendments were removed. §10-114
- Energy Commission-approved community shared solar or renewable system and energy storage system qualification requirements updated. §10-115

Mandatory Requirements:

- Minimum HVAC efficiency requirements updated for various equipment types, and minimum efficiency requirements added for Dedicated Outside Air System (DOAS), ACs serving computer rooms, and heat pump and heat recovery chiller packages. §110.2
- Demand responsive lighting controls trigger changed to 4,000 watts or more, and requirements added for controlled receptacles. §110.12 & §160.5(b)4E
- All envelope insulation, vapor retarder, and fenestration requirements unified. §160.1
- For dwelling units, new requirements for central fan integrated ventilation systems requiring a motorized controlled damper, damper controls, and variable ventilation. §160.2(b)2Aii
- For dwelling units, vented kitchen range hoods require ventilation rates or capture efficiencies based on conditioned floor area and fuel type (see Tables 160.2-E, F, and G). §160.2(b)2Avic2
- For dwelling units, installed Heat recovery ventilation (HRV) and energy recovery ventilation (ERV) systems must have a Home Energy Rating System (HERS) verified maximum fan efficacy of 1.0 W/cfm. §160.2(b)2Biii
- For common areas, filter racks or grilles shall be gasketed or sealed to prevent air from bypassing the filter. §160.2(c)1D
- Mechanical ventilation systems of enclosed parking garages must meet the requirements of §120.6(c). §160.2(d)
- For dwelling units, duct leakage and HVAC airflow and fan watt draw testing is conducted by installing contractor in buildings with four or more habitable stories. Exceptions are provided for certain climate zones. §160.3(b)5K & §160.3(b)5L
- For common areas, formerly prescriptive duct leakage testing is now mandatory. §160.3(c)2H
- New acceptance testing requirements added for dwelling units. §160.3(d)2
- Water heating piping must be insulated per Table 160.4-A. §160.4(f)
- Indoor and outdoor lighting requirements unified and applicability clarified for dwellings, common areas, and outdoor lighting. §160.5
- Requirements clarified for communal pool and spa systems versus private single-tenant pools and spas. §160.7(b)
- New electric ready requirements for space heating, cooking, and clothes dryers serving individual dwelling units and common areas, when gas equipment is installed. Electrical infrastructure must be provided and reserved to the equipment location for the future installation of electrical appliances. §160.9(a)-(c)

Prescriptive Compliance:

- All envelope requirements unified. Vertical fenestration and glazed doors area requirements based on conditioned floor area and gross wall area. Fenestration efficiency values dependent on type, climate zone, and number of habitable stories. §170.2(a)



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- All HVAC requirements unified. For dwelling units: heat pump baselines for space heating in most climate zones; refrigerant charge; and Central Fan Integrated (CFI) fan efficacy testing applies to all multifamily buildings but installing contractor conducts testing for buildings with four or more habitable stories; ERV/HRV required when balanced ventilation is used to meet ventilation requirements in certain climate zones. §170.2(c)3
- For common use areas: major revisions to fan power requirements, including one kW fan electrical input power trigger and multiple new allowances for system type, air flow, filtration, etc.; and new requirements added for DOAS and exhaust air heat recovery. §170.2(c)4
- Water heater requirements unified. Water heaters serving single dwelling units must be a Heat pump Water Heater (HPWH) with certain plumbing conditions for climate zones 1 and/or 16, or gas instantaneous water heater up to 200,000 Btu/h; new plumbing and configuration requirements for central HPWHs; in climate zones 1-9, gas/propane central water heater systems must meet minimum equipment thermal efficiency, recirculation, and solar water heating meeting certain solar savings fraction. §170.2(d)
- Indoor common area lighting and outdoor lighting requirements unified. Updates to indoor luminaire power densities (LPDs) and outdoor hardscape and additional lighting power allowances. §170.2(e)
- New photovoltaic (PV) and battery storage requirements added for specific building types, including buildings over three habitable stories. §170.2(g)&(h)

Performance Compliance:

- All multifamily buildings use same compliance software for nonresidential buildings to demonstrate compliance.
- Approved community shared solar or battery storage programs may offset required PV or battery storage system time-dependent valuation (TDV) energy. §170.1

Additions and Alterations:

- All envelope, Indoor Air Quality (IAQ), and water heater requirements, including exceptions, for additions unified. §180.1(a)
- Water heaters installed to serve dwelling units as part of an addition must meet new construction prescriptive requirements. §180.1(a)3
- All envelope, HVAC, water heating, lighting, Electrical Power Distribution (EPD), IAQ requirements for alterations unified. §180.2(b)
- New insulation, sealing, recessed luminaires, etc. requirements added for altered vented attics. §180.2(b)1Bi
- Altered fenestration efficiency requirements dependent on type, climate zone, and number of habitable stories. §180.2(b)1C
- When applicable, duct leakage, airflow and fan watt draw, refrigerant charge testing, etc. conducted by installing contractor for buildings with more than three habitable stories. §180.2(b)2A
- For common use areas, new fan power requirements added for HVAC alterations. §180.2(b)2Bi
- Altered water heaters serving single dwelling units must be a gas/propane water heater or HPWH meeting certain criteria. §180.2(b)3C
- IAQ and mechanical exhaust requirements amended and revised to clarify applicability for alterations. Airflow, CFM and some rating verification and testing conducted by installing contractor for buildings with more than three habitable stories. §180.2(b)5