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CALIFORNIA ENERGY COMMISSION



# 2019 Building Energy Efficiency Standards SUBCHAPTER 7 Section 150.0

#### LOW-RISE RESIDENTIAL BUILDINGS – MANDATORY FEATURES AND DEVICES

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October 5, 2017 Pre Rulemaking Workshop



# §150.0–Mandatory Features and Devices §150.0(d)–Raised-Floor Insulation

# Clarified that the requirement §150.0(d) only applies to raised **framed** floors

- "Raised-floor Insulation <u>for Wood Framed</u>
<u>Assembly</u>. Raised <u>wood-framed</u> floors
separating conditioned space from unconditioned
space or ambient air shall have an overall
assembly U-factor not exceeding U-0.037 or an
installed R-value of 19 or greater."



## §150.0(i)–Thermostats

- Clarify Thermostat Requirements
  - Thermostatic Controls
  - Delete "setback"
- Clean-up, no requirement change



#### §150.0(m)12A–Air Filter Efficiency

– Require MERV 13 air filtration for:

- Ducted mechanical space conditioning systems.
- Supply ventilation systems.
- The supply side of balanced ventilation systems

# §150.0(m)12Bv–Air Filter Efficiency, System Design

Require air filters that are two or more inches in depth



## §150.0(m)12C–Air Filter Efficiency

Increase air filter particle size efficiency from MERV 6 to MERV 13

#### §150.0(o)1C–Amendments to ASHRAE 62.2 Requirements, single family dwelling Units

When determining the required dwelling unit ventilation rate, use a default value for  $CFM_{50}$  that corresponds to a dwelling unit envelope leakage of 2  $ACH_{50}$  for calculation of the infiltration credit



## §150.0(o)1E–Ventilation for Indoor Air Quality

All multifamily attached dwelling units shall have mechanical ventilation airflow rates in accordance with ASHRAE 62.2 Section 4.1.1, and comply with one of the following alternatives:

- Use of a balanced ventilation system, or
- HERS verification of dwelling enclosure leakage ≤ 0.3 cfm per ft<sup>2</sup> enclosure area (blower door test), and allow use of continuous exhaust-only or continuous supplyonly ventilation systems



#### **Residential HVAC -Furnace Fan Efficacy**

- Revise the maximum fan efficacy requirement in Section 150.0(m)13 and 150.1(c)10.
  - Add requirement for ≤ 0.45 W/cfm for gas furnaces air-handling units (existing requirement is ≤ 0.58 W/cfm).

Note: there is no change to existing 0.58 W/cfm requirement for airhandling units that are not gas furnaces.

- This is a mandatory requirement in Section 150.0(m)13
- This is also a prescriptive requirement in Section 150.1(c)10 applicable to central fan integrated ventilation system furnaces.
- There is no change in Table 150.0-B and 150.0-C return duct design compliance alternative which is available as an alternative to HERS verification of fan efficacy.
- Add requirement for ≤ 0.54 W/cfm for Small Duct High Velocity systems
- Add requirement for minimum 250 cfm/ton for Small Duct High Velocity systems



#### **KEY WEB-LINK**

#### 2019 Title 24 Utility-Sponsored Stakeholder

http://title24stakeholders.com/

#### **Building Energy Efficiency Program**

http://www.energy.ca.gov/title24/

#### Comments to be submitted to

https://efiling.energy.ca.gov/EComment/EComment.aspx?docketnumber=17-BSTD-01



#### CALIFORNIA ENERGY COMMISSION

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# **Questions/Comments**

