

## EQUIPMENT



### Equipment Efficiencies

Space-conditioning equipment may be installed only if the manufacturer has certified to the Commission that the equipment complies with all the applicable requirements, including efficiencies. Check the CF-1R for the minimum efficiencies for each project. Check the CF-2R for certification of efficiencies. Use AHRI information, not the yellow EnergyGuide label.

**Code Reference:** 2013 Title 24, Part 6 Standards §110.2(a)



### Equipment Sizing – Load Calculations

Building heating and cooling loads shall be determined using a method based on: The ASHRAE Handbook, the SMACNA Residential Comfort System Installation Standards Manual, or ACCA Manual J.

**NOTE:** Under-sizing of heating system is not allowed by the CBC. Over-sizing of the heating system and under- or over-sizing of the cooling system should be documented and explained by the designer.

**Code Reference:** 2013 Title 24, Part 6 Standards §150.0(h)1]



### Fireplaces

#### REQUIRED FEATURES

If a masonry or factory-built fireplace is installed, it shall have the following:

- Closeable metal or glass doors covering the entire opening
- A outside air intake at least 6 square inches in area and equipped with a readily accessible, operable, and tight-fitting damper or combustion-air control device, unless the fireplace will be installed over concrete slab flooring and not on an exterior wall.
- A flue damper with a readily accessible control.



#### PROHIBITED FEATURES

Masonry or factory-built fireplaces:

- Continuous burning pilot lights are prohibited.
- The use of indoor air for cooling a firebox jacket, when that indoor air is vented to the outside of the building is prohibited.

**Code Reference:** 2013 Title 24, Part 6 Standards §150.0(e)

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### Thermostats

Heating systems shall be equipped with thermostats that have a clock mechanism with set points for at least four periods within 24 hours.

EXCEPTIONS: Gravity gas wall heaters, room heaters, non-central electric heaters, fireplaces or decorative gas appliances, wood stoves, room air conditioners, etc.

**Code Reference:** 2013 Title 24, Part 6 Standards §150.0(i), 110.2(c)

Heat pumps with supplementary electric resistance heaters shall have controls:

1. That prevent supplementary heater operation when the heating load can be met by the heat pump alone; and
2. In which the cut-on temperature for compression heating is higher than the cut-on temperature for supplementary heating, and the cut-off temperature for compression heating is higher than the cut-off temperature for supplementary heating.

**Code Reference:** 2013 Title 24, Part 6 Standards §150.0(i), 110.2(c)



### Condenser vs. Dryer Vent Location

Installed air conditioner and heat pump outdoor condensing units shall have a clearance of at least five (5) feet (1.5 meters) from the outlet of any dryer vent.

**Code Reference:** 2013 Title 24, Part 6 Standards §150.0(h)3



### Central Furnace – Temperature Split

Central forced-air heating furnace installations shall be configured to operate in conformance with the furnace manufacturer's maximum inlet-to-outlet temperature rise specifications. See CF-2R for verification.

**Code Reference:** 2013 Title 24, Part 6 Standards §150.0(h)4

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