

DOCKETED

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Proposed Baseline HVAC System #14: High-Rise Residential Dwelling and Hotel/Motel Guest Room Split HVAC System

Proposed as a new baseline system for high-rise residential living quarters and hotel/motel guest rooms.

System #14 Description

System Description: High-Rise Residential Dwelling and Hotel/Motel Guest Room Split HVAC System

Supply Fan Power: Section 5.7.3.1

Supply Fan Control: Constant Volume

Min Supply Temp: $50 < T < 60$ DEFAULT: 20F below return air temperature

Cooling System: Direct expansion (DX)

Cooling Efficiency: Minimum SEER or EER based on equipment type and output capacity of standard design unit(s).

Adjusted EER is calculated to account for supply fan energy.

Maximum Supply Temp: $85 < T < 110$ DEFAULT: 100

Heating System: Gas furnace (#3) or heat pump (#4)

Heating Efficiency: Minimum AFUE, Thermal Efficiency, COP or HSPF based on equipment type and output capacity of standard design unit(s).

Economizer: None, as Exception 3 to Section 140.4(e)1 exempts all high-rise residential living quarters and hotel/motel guest rooms from prescriptive economizer requirement.

Ducts: For ducts installed in unconditioned buffer spaces or outdoors as specified in Â§140.4(l), the duct system efficiency shall be as modified by accounting for duct leakage rate, insulation level and the duct surface area in unconditioned space or outdoors; see applicable building descriptors.