



Heat Pumps <65,000 Btuh – Minimum Heating and Cooling Efficiencies

Table 1 applies to single-phase air source heat pumps with a cooling capacity <65,000 Btuh. See Table 2 for non-heat pump air conditioners.

Configuration	Manufactured BEFORE 1/1/2023		Manufactured ON or AFTER 1/1/2023*	
	HSPF	SEER	HSPF2	SEER2
Packaged	8.0	14.0	6.7	13.4
Split (including ductless)	8.2	14.0	7.5	14.3
Space-constrained ①	7.4	12.0	6.3	11.9
Small Duct High-velocity	7.2	12.0	6.1	12.0

HSPF = heating season performance factor; SEER = seasonal energy efficiency ratio.
* Systems manufactured on or after 1/1/2023 must meet the newer HSPF2/SEER2 requirements and cannot use HSPF or SEER.

Table 1. Adapted from the Code of Federal Regulations, per 10 CFR 430.32(c)

Central Air Conditioners (not Heat Pumps) <65,000 Btuh – Minimum Cooling Efficiencies

Configuration	Rated Cooling Capacity (Btuh)	Installed BEFORE 1/1/2023		Installed ON or AFTER 1/1/2023*	
		SEER	EER	SEER2	EER2
Split System	<45,000	14.0	12.2	14.3	11.7/9.8**
	≥45,000	14.0	11.7	13.8	11.2/9.8**
Single Package	<65,000	14.0	11.0	13.4	10.6
Space-constrained ①	<30,000	12.0***	no minimum	11.7***	no minimum

SEER = seasonal energy efficiency ratio; EER = energy efficiency ratio.
* Regardless of manufacture date, systems installed on or after 1/1/2023 must meet the newer SEER2/EER2 requirements and cannot use SEER or EER.
** For systems with 15.2 SEER2 or greater, the minimum EER2 requirement is 9.8.
*** Use the manufacture date, not installation date, for space-constrained units.

Table 2. Adapted from the Code of Federal Regulations, per 10 CFR 430.32(c)

Gas- and Oil-fired Central Furnaces – Minimum Heating Efficiencies

Appliance	Rated Input (Btuh)	Minimum Efficiency (%)	
		AFUE	TE
Weatherized Gas Central Furnaces with Single Phase Electrical Supply	<225,000	81%	—
Non-weatherized Gas Central Furnaces with Single Phase Electrical Supply	<225,000	80%	—
Weatherized Oil Central Furnaces with Single Phase Electrical Supply	<225,000	78%	—
Non-weatherized Oil Central Furnaces with Single Phase Electrical Supply	<225,000	83%	—
Gas Central Furnaces	≥225,000	—	81%
Oil Central Furnaces	≥225,000	—	82%

AFUE = annual fuel utilization efficiency; TE = thermal efficiency.

Table 3. Adapted from the California Appliance Efficiency Regulations Title 20, Tables E-5 and E-6

Federally Regulated Residential Water Heaters — Minimum Domestic Hot Water (DHW) Efficiencies

Product Class	Rated Storage Volume (Gallons)	Draw Pattern	Uniform Energy Factor (UEF) Minimum Requirement
Consumer Gas-fired Instantaneous ($\leq 200,000$ Btuh)	≤ 2	Low/Medium/High	0.81
Consumer Gas-fired Storage ($\leq 75,000$ Btuh)	40	Medium	0.58
	50		0.56
	60		0.77
	70		0.76
	80		0.76
	40	High	0.64
	50		0.63
	60		0.79
	70		0.79
	80		0.78
Residential-duty Commercial Gas-fired Storage ($> 75,000$ Btuh, $\leq 105,000$ Btuh)	50	Medium	0.55
	60		0.53
	70		0.52
	80		0.51
	50	High	0.61
	60		0.61
	70		0.59
	80		0.59
Consumer Electric Instantaneous (≤ 12 kW)	≤ 2	Very Small/Low/Medium	0.91
Electric Grid-enabled Storage (≤ 12 kW)	80	High	0.92
	90		0.91
	100		0.90
Electric Storage (including Heat Pump) (≤ 12 kW)	40	Medium	0.92
	50		0.92
	60		2.05
	40	High	0.93
	50		0.93
	60		2.18

Table 4. Adapted from the Code of Federal Regulations, per 10 CFR 430.32(d)

- 1 A space-constrained product means a central air conditioner or heat pump that:
 - (1) Has a rated cooling capacity $\leq 30,000$ Btuh
 - (2) Is a product type that was available for purchase in the United States as of December 1, 2000
- (3) Has an outdoor or indoor unit having at least two overall exterior dimensions or an overall displacement that:
 - a. Are substantially smaller than those of other units that are both
 - i. Currently usually installed in site-built single-family homes
 - ii. Has a similar cooling, and, if a heat pump, heating, capacity
 - b. If increased, would certainly result in a considerable increase in the usual cost of installation or would certainly result in a significant loss in the utility of the product to the consumer

