New 2023 Efficiency Requirements for HVAC Equipment

Home Innovation RESEARCH LABS™

April 5, 2022

For 2023, the Department of Energy (DOE) is increasing the minimum efficiencies for central split system air conditioners and heat pumps.[1] In addition to increasing minimum efficiencies, HVAC manufacturers will also be required to comply with a new testing procedure for developing efficiency ratings.

The new regulations will go into effect on January 1, 2023. For air conditioners, the minimum efficiency will increase from 13.0 to 14.0 SEER in the North and from 14.0 to 15.0 SEER in the South. The national heat pump minimum efficiency will increase from 14.0 SEER and 8.2 HSPF to 15.0 SEER and 8.8 HSPF.

For the North Region, any 13.0 SEER air conditioner manufactured before January 1, 2023, can still be installed on or after January 1, 2023. For the Southeast and Southwest Regions, any air conditioner that does not meet the new requirements cannot be installed on or after January 1, 2023. Any 14.0 SEER heat pump manufactured before January 1, 2023, can still be installed on or after January 1, 2023.[2]

Compared to the current test procedure, the new test procedure is more stringent (uses a higher external static pressure to better reflect field conditions) and results in a lower efficiency rating. Therefore, new metrics will be introduced in 2023: SEER2, EER2, and HSPF2. For example, a minimum efficiency of 14.0 SEER under the current test procedure will become a 13.4 SEER2 under the new test procedure, so in the North Region an air conditioner must have a SEER2 rating of 13.4 (14.0 SEER).

For air conditioners, the geographic regions are the same: North, Southeast, and Southwest.[3] The new minimum efficiency requirements for 2023 are summarized in the tables below.[4]

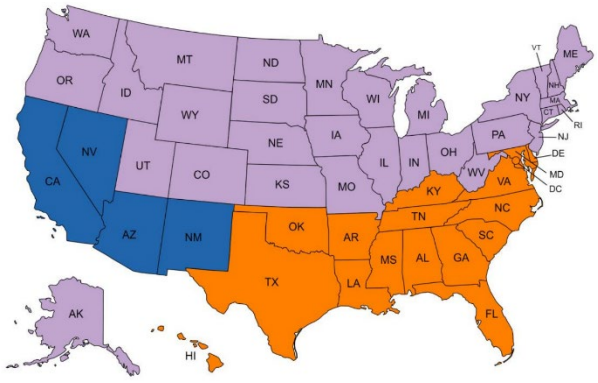
Split System Air Conditioners: 2023 Minimum Efficiency Regional Standards

System Type	North Region		Southeast Region		Southwest Region	
AC (< 45 kBtuh)	14.0 SEER	13.4 SEER2	15.0 SEER	14.3 SEER2	15.0 SEER and 12.2 EER*	14.3 SEER2 and 11.7 EER2**
AC (≥ 45 kBtuh)	same	same	14.5 SEER	13.8 SEER2	14.5 SEER and 11.7 EER*	13.8 SEER2 and 11.2 EER2**

Notes: *10.2 EER if SEER ≥ 16.0; **9.8 EER2 if SEER2 ≥ 15.2

Split System Heat Pump: 2023 Minimum Efficiency National Standards

System Type	SEER and HSPF	SEER2 and HSPF2
Heat Pump	15.0 SEER and 8.8 HSPF	14.3 SEER2 and 7.5 HSPF2



1. U.S. Energy Information Agency, *Efficiency requirements for residential central AC and heat pumps to rise in 2023*
2. Johnstone Supply, *The SEER2 Guide*
3. Map source, AHRI: *New U.S. Energy Efficiency Standards and Refrigerants for Residential ACs and Heat Pumps*
4. For Single Packaged Units, the current national ratings of 14.0 SEER and 8.0 HSPF remain the same, but these units will still need to adhere to the new testing method and meet 13.4 SEER2 and 6.7 HSPF2 ratings.