

DEPARTMENT OF ENERGY

2023 REGULATORY REQUIREMENTS



The U.S. Department of Energy (DOE) has mandated new minimum cooling energy efficiency requirements for newly manufactured residential and commercial air conditioners and heat pumps, which will take effect on January 1, 2023, as follows:

- Air conditioners installed in northern climates must achieve a 14.0 SEER rating (up from 13.0 SEER), and in the southeast and southwest regions must achieve a 15.0 SEER* rating (up from 14.0 SEER). Both measurements can be reached using current (pre-2023) SEER test procedures.
- Heat pumps, regardless of location, must achieve a minimum efficiency of 15.0 SEER (up from 14.0 SEER).
- The new efficiency requirements also include more stringent testing procedures, creating new nomenclature for efficiency (SEER2, EER2, HSPF2).

NEW TESTING AND MEASUREMENT PROCEDURES

Alongside the new efficiency requirements are more stringent testing requirements for all residential and 3-5 ton light commercial, single-phase products manufactured on or after January 1, 2023. This new testing procedure will more accurately account for field conditions by increasing external static pressure, or ESP, from 0.3 to 0.5 and will result in several other changes, including:

New efficiency standards

Changes are as follows:

SEER	→	SEER2
EER	→	EER2
HSPF	→	HSPF2

Minimum efficiency reduction

Because the new, SEER2, EER2 and HSPF2 ratings will be determined through more rigorous testing procedures, minimum efficiency requirements will be reduced for SEER2, EER2 and HSPF2 ratings versus the 2023 SEER, EER and HSPF minimum efficiency ratings for each region. For instance, the northern region's current minimum requirement is 13.0 SEER. In the future, the minimum requirement will be 14.0 SEER or 13.4 SEER2.

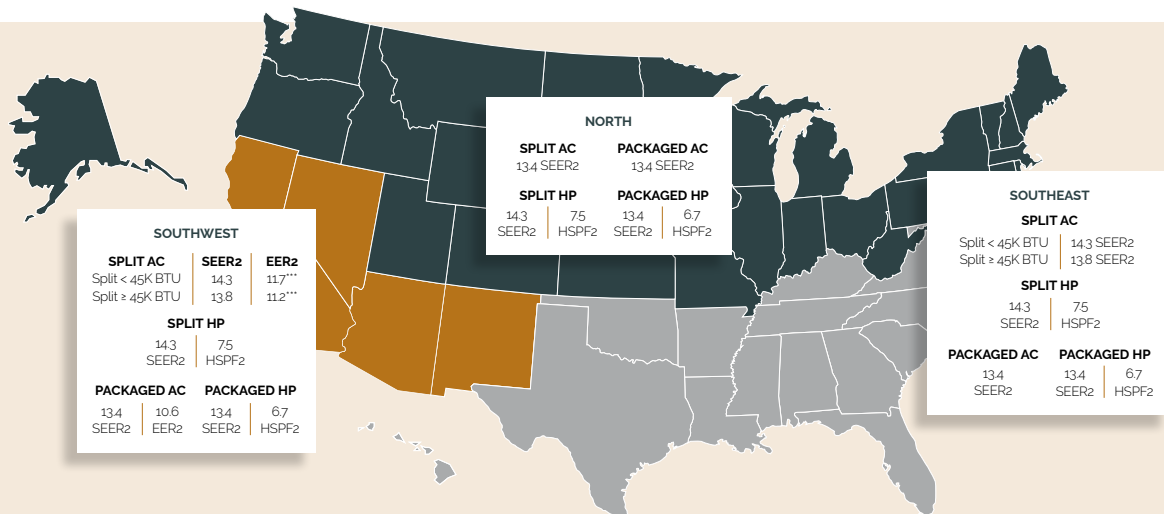
Retesting

Every product tier will need to be retested, reoptimized and relaunched in accordance with the new DOE test procedures. This will be a large undertaking by manufacturers compared to previous efficiency requirement changes.**

Additional changes

The new DOE testing requirements will also result in changes to the airflow set point on indoor blowers, including fan coils and furnaces.

EFFECTIVE DATES 1/1/2023 AND AFTER



*15.0 SEER if less than 45k BTU, or 14.5 SEER if at or above 45k BTU, EER requirements also apply in the southwest region: 12.2 EER < 45k BTU or 11.7 EER ≥ 45k BTU, if SEER > 16 then EER minimum is 10.2

**Three-phase packaged air conditioners and heat pumps < 65,000 BTU do not have an established conversion date, while ASHRAE 90.1 - 2019 has been updated to the values shown above. DOE has not yet established an effective date for amended energy conservation standards.

***9.8 EER2 if SEER2 ≥ 15.2

AFTER JANUARY 1, 2023, CAN I INSTALL A NEW AIR CONDITIONER OR HEAT PUMP IF IT IS RATED TO THE "OLD" SEER METRIC?

All products that were legally compliant on the day that they were manufactured are considered legal to distribute, sell and install in the majority of U.S. states, though there are different requirements based on "regional standards states."

WHAT ARE "REGIONAL STANDARDS STATES?"

Southeast Region	Southwest Region
Alabama, Arkansas, Delaware, Florida, Georgia, Hawaii, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, District of Columbia and U.S. Territories	Arizona, California, Nevada, New Mexico

All other U.S. states not listed above will follow the National Standard.

WHAT ARE THE DIFFERENT SELL-THROUGH REQUIREMENTS BY REGION?

DOE Product Class	New Standards Effective By	Exception
Residential north/national AC	Date of mfrg – sell-through allowed	N/A
Residential southeast AC	Date of install – see exception	Products > 2023 minimums can be sold and installed after 1/1/2023
Residential southwest AC	Date of install – see exception	Products > 2023 minimums can be sold and installed after 1/1/2023
Residential national HP	Date of mfrg – sell-through allowed	N/A
Commercial, all products	Date of mfrg – sell-through allowed	Three-phase < 65k BTU delayed until 2025 (pending DOE final rule)

Notes: Outdoor AC units built prior to 1/1/2023 which have an approved DOE Energy Guide label (aka "hang tag") with a published efficiency rating that meets or exceeds the new 2023 minimum efficiency ratings for their given region (see Split System Air Conditioners - 2023 Regional Standards table) can continue to be sold and installed as "condensers only" or "entire system" replacements on or after 1/1/2023.

Outdoor AC units built prior to 1/1/2023 for the southeast and southwest regions whose Energy Guide labels (hang tags) show ratings less than the new 2023 minimums for a given region can only be installed in the north region.

SPLIT SYSTEM AIR CONDITIONERS – 2023 REGIONAL STANDARDS

System Type	North Region			Southeast Region			Southwest Region		
	2015 Minimum Rating 13.0 SEER	New SEER	New SEER2	2015 Minimum Rating 14.0 SEER	New SEER	New SEER2	2015 Minimum Rating 14.0 SEER and 12.2 EER/ 11.7 EER***	New SEER	New SEER2
Split System ACs (AC < 45K BTU)		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 ^{**}
Split System ACs (AC ≥ 45K BTU)		14.0 SEER	13.4 SEER2		14.5 SEER	13.8 SEER2		14.5 SEER and 11.7 EER [*]	13.8 SEER2 and 11.2 EER2 ^{**}

^{*}10.2 EER if SEER ≥ 16.0 ^{**}9.8 EER2 if SEER2 ≥ 15.2 ^{***}12.2 EER if < 45K BTU, 11.7 EER if ≥ 45K BTU

ADDITIONAL RESOURCES

For more information and resources about these changes and how they impact your business, work with your local distributor or visit the regulatory agency sites listed below:



U.S. Department of Energy
(Energy.gov)



U.S. Environmental Protection Agency
(EPA.gov)



EPA and DOE Energy Efficiency
(Energystar.gov)



U.S. Government's National Archives
(Federalregister.gov)



The Fraser-Johnston brand of Johnson Controls, Inc. ©2022 Johnson Controls, Inc. 5005 York Drive, Norman, OK 73069 www.fraser-johnston.com. Subject to change without notice. PUBL-4712-A-0921. All rights reserved.