

What You Need to Know 2023 REGULATIONS

New minimum
efficiency and testing
requirements will begin
January 1, 2023.

2023



PREPARING FOR 2023



New minimum energy efficiency standards for the Department of Energy (DOE) begin on January 1, 2023, and Daikin and its family of brands will be ready to serve your needs. When it comes to providing energy-efficient quality products that meet future demands, our priority is to be a leader within the HVAC industry.

These new regulations are an effort to reduce energy consumption. HVAC manufacturers will be required to produce central air-conditioning and air-source heat pump systems that meet new minimum 2023 energy efficiency standards. The minimum efficiency requirements are changing, but testing regulations that determine efficiencies have also been amended.

As a manufacturer, we are investing in engineering, materials and testing to continue to produce compliant products, and have begun a multi-step process to ensure compliance with new 2023 regulations. It is also important that we inform, educate and equip you, our valued customer, with the tools to be successful with this transition to new efficiency standards and equipment requirements.

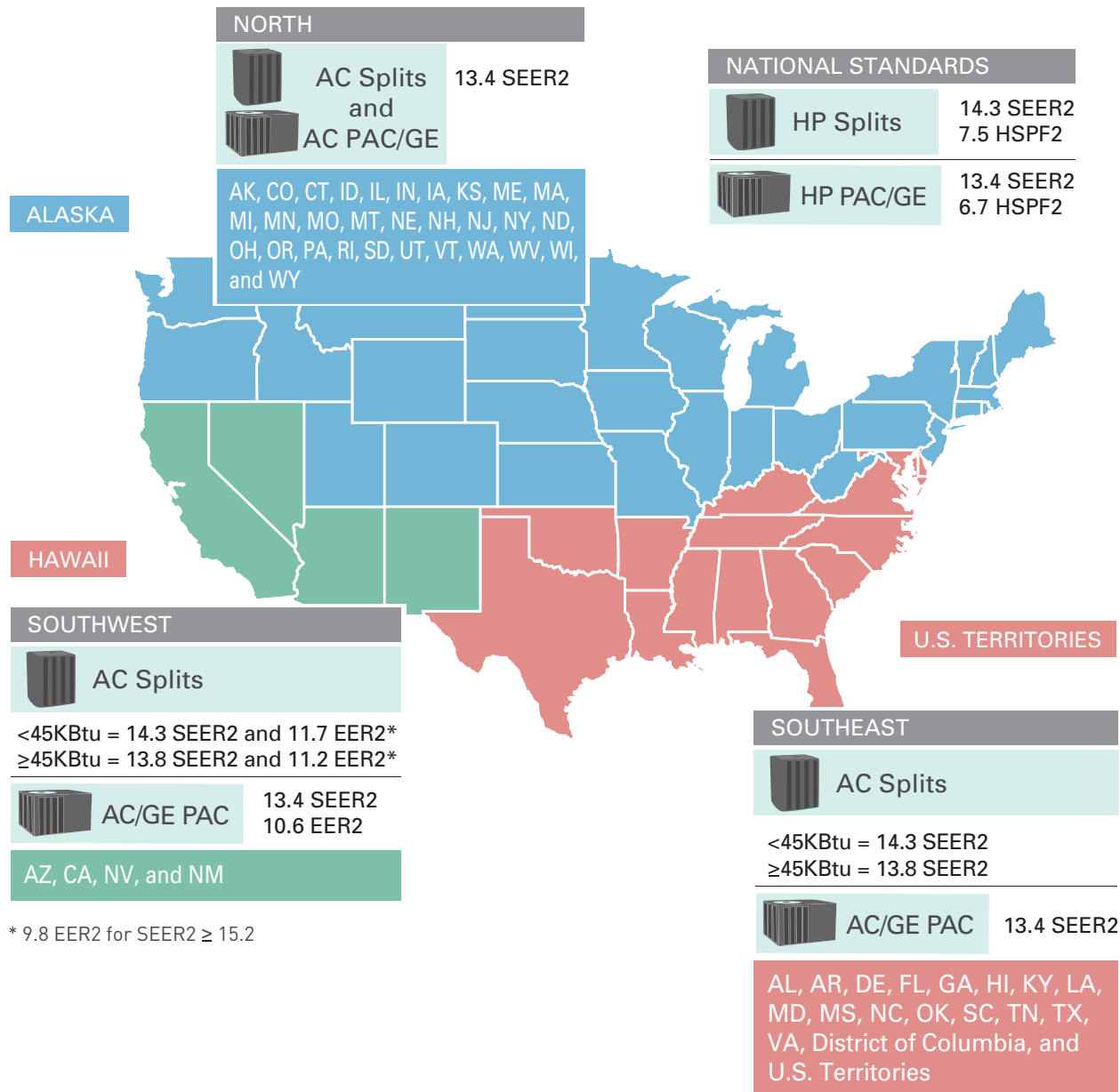
Our customers are always top of mind, and we will continue to support you by producing energy-efficient products that meet the DOE requirements.

This document summarizes certain Department of Energy (DOE) regulations applicable to HVAC products as of the date of publication and is not intended to provide legal advice on how to comply with the DOE's regulations. You should consult with legal counsel to determine the application of the DOE's regulations to your particular situation and any changes since the publication of this document.

2023 Minimum Efficiency Standards

The new minimum efficiency standards are based upon new metrics (SEER2/EER2/HSPF2) derived from a new test procedure (M1) rather than the historical metrics (SEER/EER/HSPF) from the old test procedure (M). Below are the new minimum efficiencies with the new metrics.

2023 Geographic Efficiency Standards



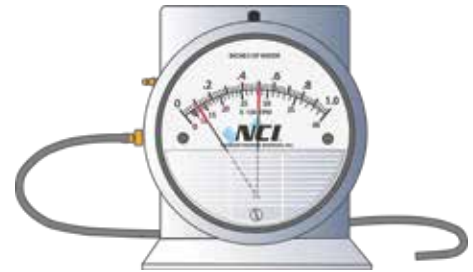
* 9.8 EER2 for SEER2 ≥ 15.2

The NEW M1 2023 Testing Standards

Testing procedures and requirements for developing efficiency ratings will now be more stringent with the new 2023 DOE regulations. The current M testing procedure is being replaced by the M1 testing procedure for 2023 compliance.

Under the new 2023 DOE Test Procedure M → M1

Current DOE M Procedure		2023 DOE M1 Procedure
Higher Static Pressure	0.1 - 0.2" H ₂ O w.c.	0.5" H ₂ O* w.c.
Coil Only	365 W/1000 cfm	441 W/1000 cfm
Test Conditions	Coldest test 17°F	Coldest test 5°F
Heat Load Beginning Point	65°F	55°F
Building Load Line Slope	.77	1.15 (1.07 for variable speed)



*M1 static is 0.3 for some units.
**Optional

For decades, the HVAC industry has used the classic metrics of SEER, EER and HSPF. As we prepare for 2023, you will hear the new metric terms SEER2, EER2 and HSPF2. These terms reflect equipment metrics tested under the new M1 testing standards.

SEER	Ducted SEER2	Ductless SEER2
14.0	13.4	14.0
14.5	13.8	14.5
15.0	14.3	15.0
15.5	14.8	15.5
16.0	15.2	16.0
17.0	16.2	17.0
17.5	16.7	17.5
18.0	17.2	18.0
19.0	18.1	19.0
20.0	19.0	20.0

EER	Ducted EER2	Ductless EER2
10.2	9.8	10.2
11.0	10.5	11.0
11.5	11.0	11.5
11.7	11.2	11.7
12.0	11.5	12.0
12.2	11.5	12.2
12.5	12.0	12.5
13.0	12.5	13.0

HSPF	Ducted Split HSPF2	Ducted Package HSPF2	Ductless HSPF2
8.0	6.8	6.7	7.7
8.2	7.0	6.9	7.9
8.8	7.5	7.4	8.4
9.0	7.7	7.6	8.6
9.5	8.1	8.0	9.1
10.0	8.5	8.4	9.5
11.0	9.4	9.2	10.4

NOTE: The cross references for efficiency in the above tables should be noted as approximate.

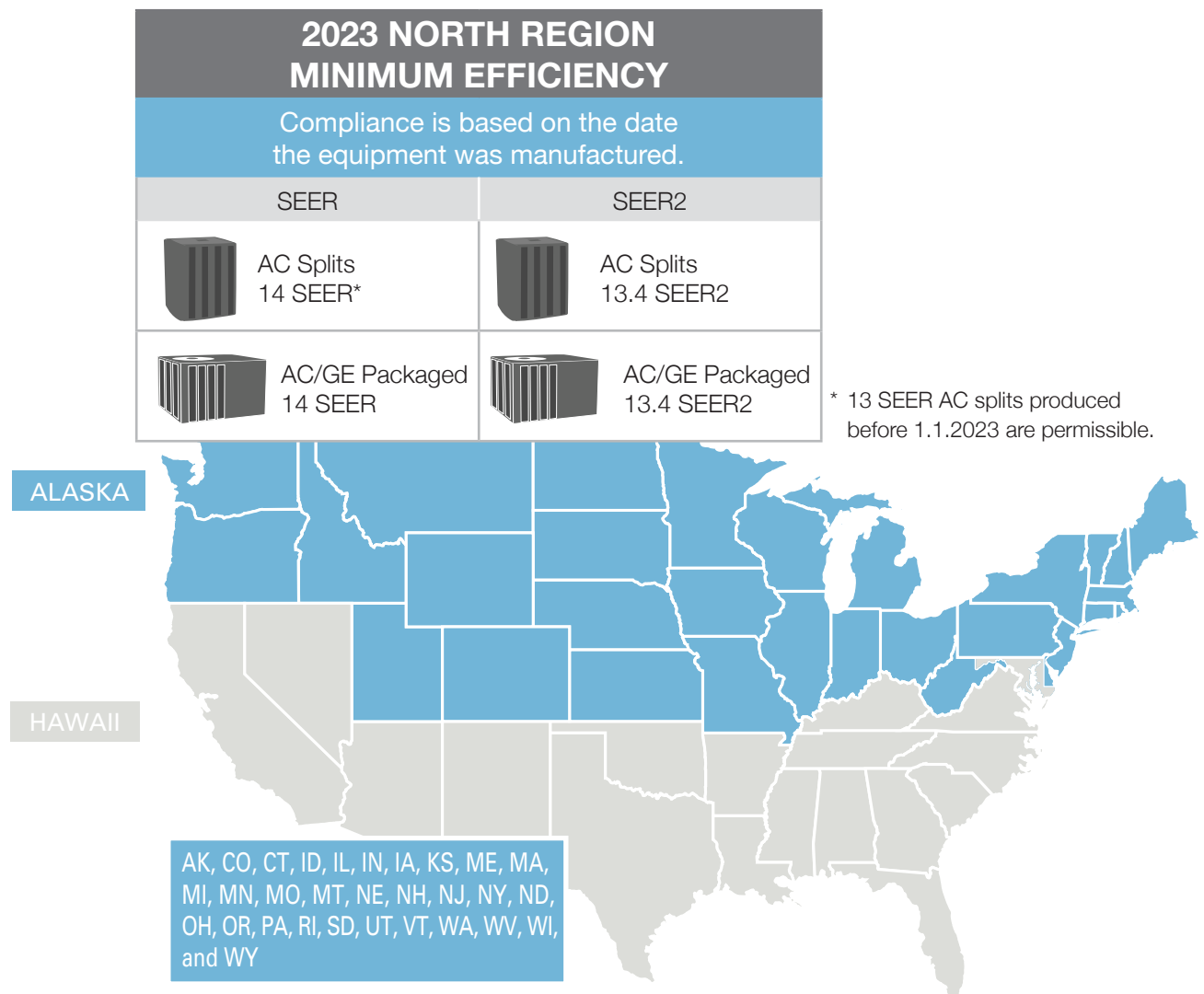
Regional Compliance – Installation or Manufactured Date?

Compliance for 2023 equipment may be based on the installation date or manufactured date, depending on location.

National standards dictate that both split heat pumps and package heat pumps be compliant as of the date of manufacture. The following graphics detail 2023 regional compliance which apply to split AC, packaged AC and packaged gas/electric only.



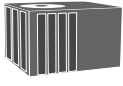
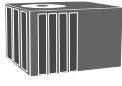
North Region

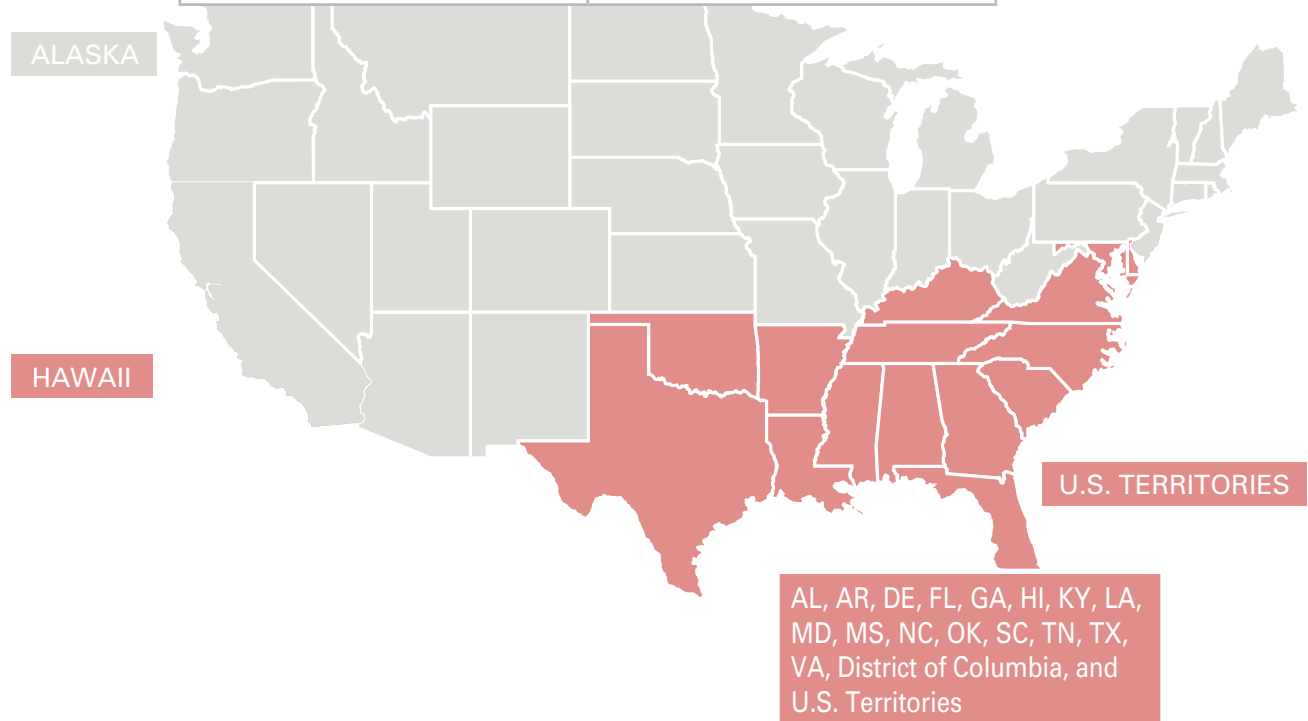
When equipment, as part of an AHRI-rated matched system, is compliant on the day the manufacturer produced it, it can continue to be sold and installed in the North region.



Southeast Region

2023 compliance for the Southeast region is based on the installation date for AC split units and AC package units. Compliance in the Southeast for all other product types is based on the date of manufacture. The SEER or SEER2 number on the yellow EnergyGuide label attached to the equipment can help determine compliance with the new regional standard (see page 7).



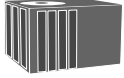
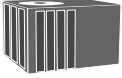
2023 SOUTHEAST REGION MINIMUM EFFICIENCY	
Compliance is based on the date of installation.	
SEER	SEER2
 AC Splits <45KBtu = 15 SEER ≥45KBtu = 14.5 SEER	 AC Splits <45KBtu = 14.3 SEER2 ≥45KBtu = 13.8 SEER2
 AC/GE Packaged 14 SEER	 AC/GE Packaged 13.4 SEER2



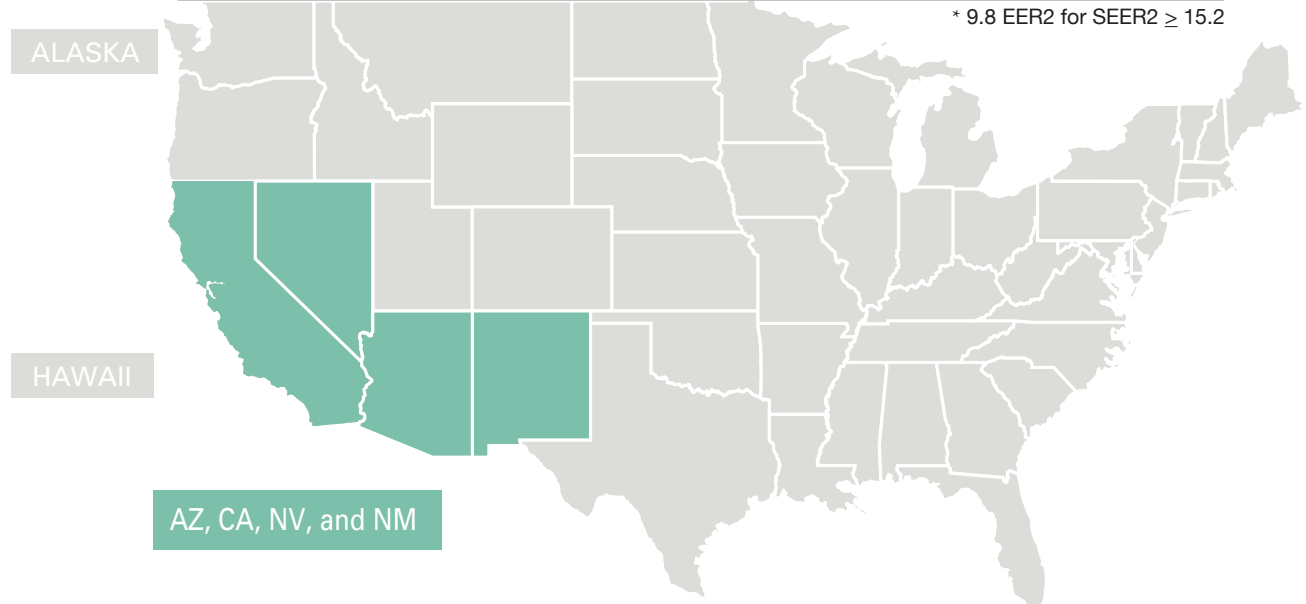
Note that the U.S. Territories are now part of the Southeast (before 1/1/2023 they are part of the North).

Southwest Region

2023 compliance for the Southwest region is based on the installation date for AC split units and AC and gas/electric package units. Compliance in the Southwest for all other product types is based on the date of manufacture. The SEER or SEER2 number on the yellow EnergyGuide label attached to the equipment can help determine compliance with the new regional standard (see page 7).

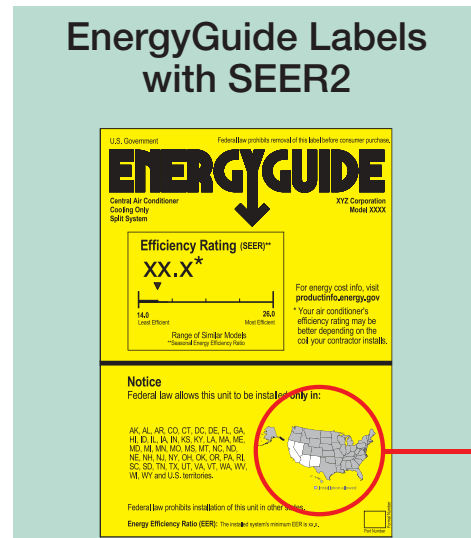
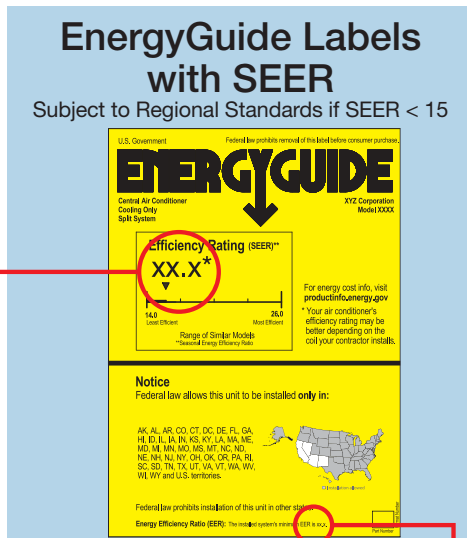
2023 SOUTHWEST REGION MINIMUM EFFICIENCY	
Compliance is based on the date of installation.	
SEER and EER	SEER2 and EER2
 AC Splits 15 SEER and 12.2 EER 14.5 SEER and 11.7 EER	 AC Splits <45KBtu = 14.3 SEER2 and 11.7 EER2* ≥45KBtu = 13.8 SEER2 and 11.2 EER2*
 AC/GE Packaged 14 SEER 11.0 EER	 AC/GE Packaged 13.4 SEER2 10.6 EER2

* 9.8 EER2 for SEER2 ≥ 15.2



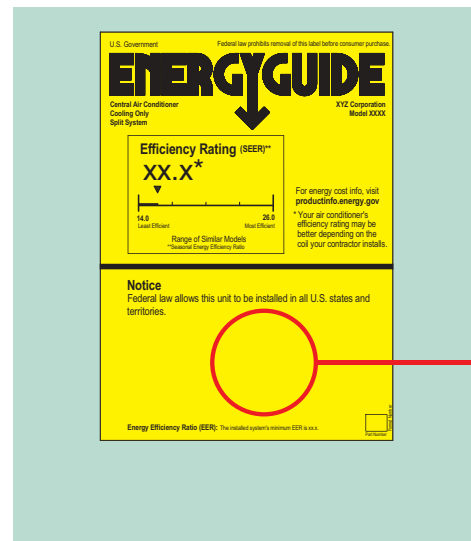
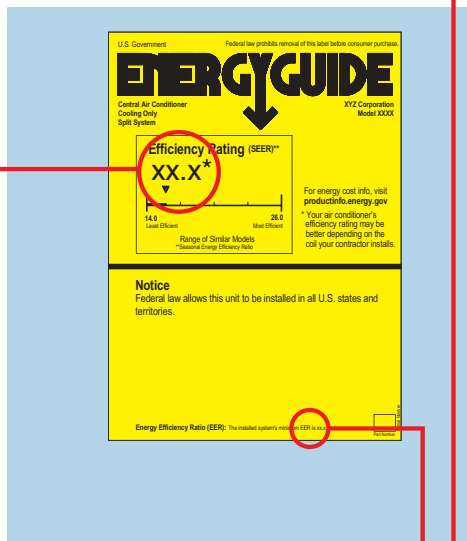
Location, Location, Location

While heat pumps minimum efficiency standards apply on a national basis, it is important to remember that 2023 efficiency standards for AC products will continue to vary based on region. Some AC units will be able to be sold nationally, while other AC units will be restricted to installation in certain regions. These EnergyGuide labels will help to determine where an AC unit can be legally installed.



Number
SEER ≥ 15
(for 1.5 to 3.5 ton*)
SEER ≥ 14.5
(for 4 to 5 ton**)
can be installed
in SouthEast

With map –
subject to
Regional
Standards



No map –
can be installed
nationally

Can be installed in SouthWest
EER > 12.2 if 1.5 to 3.5 ton*
> 11.7 if 4 or 5 ton**
> 10.2 if SEER ≥ 16

* Less than 45,000 BTUs
** Greater than 45,000 BTUs

Non-Compliance Will Cost You

The DOE enforces efficiency standards across several industries, including the HVAC industry's new 2023 efficiency standards. Similar to the 2015 standards, there will be consequences for 2023 non-compliance.

Contractors:

- Contractors installing non-compliant equipment could be forced to replace the equipment at their cost.
- Routine violators can be placed on a national do-not-sell list.

Distributors:

- Distributors could be subject to the same do-not-sell penalty if they knowingly and repeatedly supply non-compliant equipment to contractors who install that equipment in violation of the regional minimum.

Any distributor or contractor identified as a routine violator may be prohibited from purchasing any of the seven classes of products identified in the Code of Federal Regulations, 10-CFR-430.32.

2023 Record Keeping

To confirm 2023 compliance, contractors and distributors in the Southeast and Southwest region must continue to maintain detailed split and packaged air conditioner records. Detailed records may help protect you in the event of a DOE audit or investigation. You could be required to provide details, including models, serial numbers, delivery or installation addresses, of every piece of equipment sold, delivered and installed.



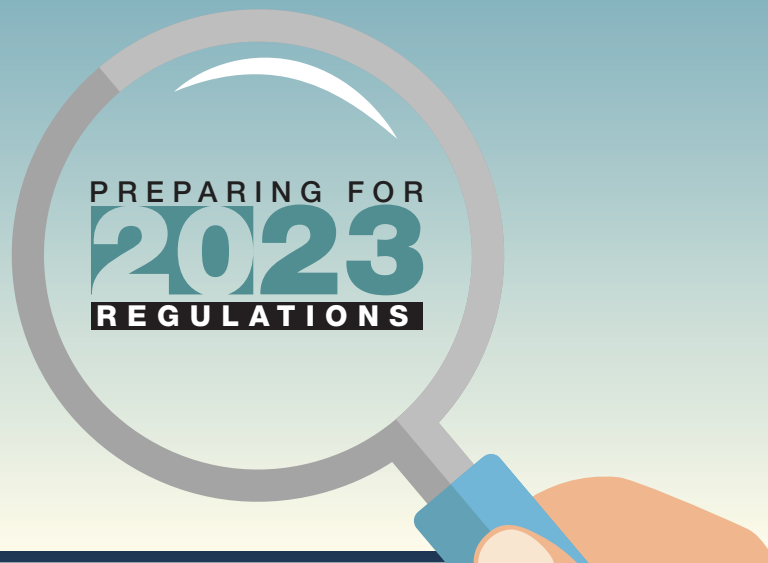
Contractors:

Maintain records of split-system central air conditioners (both indoor and outdoor units) and single packaged air conditioners for 48 months

Distributors:

Maintain records of split-system central air conditioner outdoor units and single packaged air conditioners for 54 months

NOTE: The information provided does not, and is not intended to, constitute legal advice. All information and content are for general informational purposes only.



Preparing Your Business for 2023

You need to protect your business by learning your region's efficiency standards and equipment requirements and by placing product orders accordingly. The key to this is *Preparing for 2023* training!

Our goal is to ensure that you are being supplied with 2023 compliant HVAC products for your market and assist you in preparing for 2023. Daikin University, Goodman Business Toolbox and Amana brand Business Academy will have workshops, webinars, and materials to help your business learn to comply with these new requirements.

Preparing for 2023 training will discuss:

- ✓ Minimum efficiency changes with maps/charts
- ✓ New SEER2, EER2 and HSPF2 M1 test procedures
- ✓ Regulatory-ready product updates
- ✓ Non-compliance consequences
- ✓ How to protect your business and maintain critical records
- ✓ And more!

For more information about *Preparing for 2023* workshops, please visit one of the following training centers for more information.



daikincity.com/#trainingcenter



amanabrandbusinessacademy.com/



goodmanbusinessstoolbox.com/

2023



About Daikin

Daikin Industries, Ltd. (DIL) is a Fortune 1,000 company with more than 84,870 employees worldwide and is the world's #1 indoor comfort solutions provider. Daikin Comfort Technologies North America (DNA), Inc is a subsidiary of DIL, providing Daikin, **Goodman**® brand, **Amana**® brand, and **Quietflex**® brand products. DNA and its affiliates manufacture heating and cooling systems for residential, commercial, and industrial use and are sold via independent HVAC contractors. DNA engineering and manufacturing is located at Daikin Texas Technology Park near Houston, TX. For additional information, visit www.northamerica-daikin.com.

Daikin and its family of brands:



To meet upcoming regulatory requirements for A2L usage, all R-410A HVAC systems will need to be redesigned, regardless of which A2L is selected. All installers of A2L systems will have to follow A2L safety precautions and procedures. R-32 should not be used in systems designed for R-410A.

The Goodman Business Toolbox program and the Amana Business Academy program are presented and administered by third-party training organizations. All training programs are designed to support independent HVAC contractors who sell Goodman® brand and Amana® brand products. Any costs for the training programs are determined and charged directly by the third-party training organizations.

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Our continuing commitment to quality products may mean a change in specifications without notice.

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