

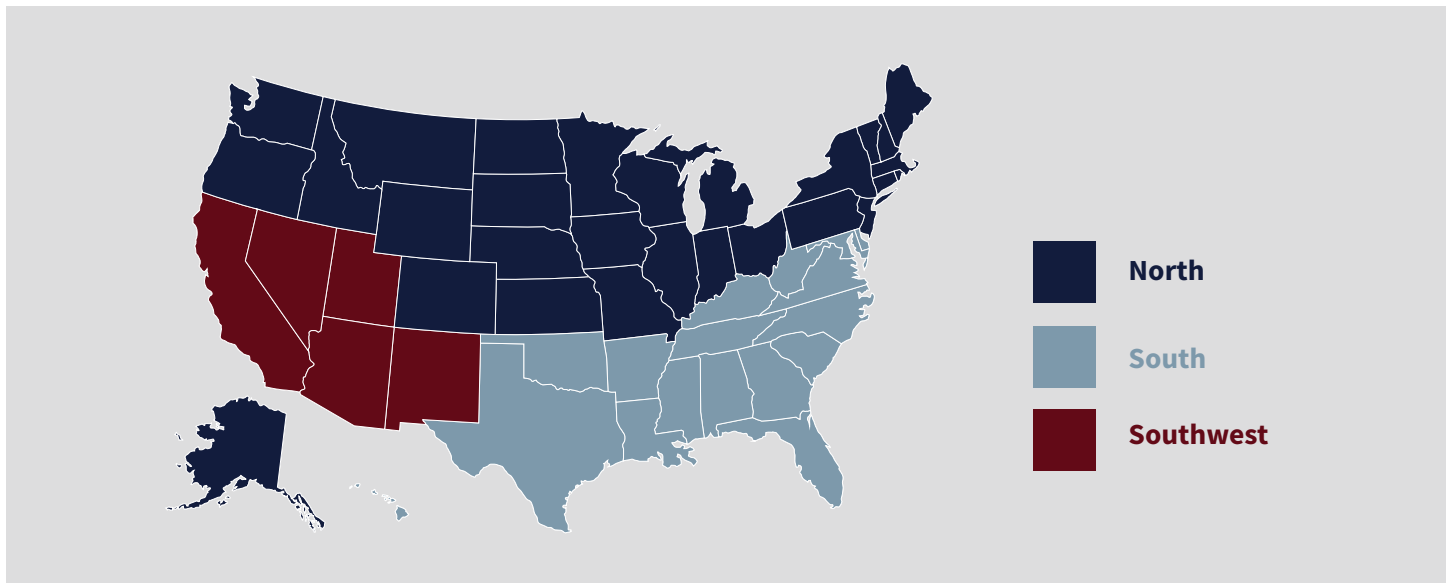
# MINIMUM EFFICIENCY STANDARDS

REVISED IN JUNE 2026

Based on U.S. DOE regulations under 10 CFR Part 430, the following represent the federal minimum energy efficiency requirements.

2023 (M1)	North (National)	South	Southwest
AC SEER2	13.4	14.3 < 45k BTUH 13.8 >= 45k BTUH	14.3 < 45k BTUH 13.8 >= 45k BTUH
AC EER2			11.7 < 45k BTUH 11.2 >= 45k BTUH 9.8 >= 15.2 SEER2
HP SEER2	14.3		
HP HSPF2	7.5		

[10 CFR § 430.32(c)(5) & 10 CFR § 430.32(c)(6)]



# LOW GWP REFRIGERANT TRANSITION

The American Innovation and Manufacturing Act (AIM Act) requires the U.S. Environmental Protection Agency (EPA) to reduce the use of high GWP refrigerants. Under EPA Technology Transitions rules, newly manufactured residential and light commercial air conditioners and heat pumps must use refrigerants with a Global Warming Potential (GWP) of 750 or less.

Although R-410A has zero ozone depletion potential (ODP), its high GWP no longer meets federal requirements for new equipment. As a result, newly manufactured HVAC equipment is transitioning to low GWP refrigerants.

## REGULATORY REQUIREMENTS – AS OF 2026:

1. Manufacturing of new residential and light commercial AC and heat pump equipment ( $\leq 65,000$  Btu/h) using R-410A for use in new system installations in the U.S. is prohibited.
2. All new system installations on or after **January 1, 2026** must use low-GWP refrigerants, including R-32 and R-454B, **EXCEPT** that systems using R-410A refrigerant that were manufactured or imported prior to **January 1, 2025** may continue to be installed until existing inventory is depleted, subject to applicable state and local regulations.

	Ozone Depletion Potential (ODP)	100-Year Global Warming Potential of Different Refrigerants
<b>R12</b> (CFC)	1.0	10,900
<b>R22</b> (HCFC)	0.055	1,810
<b>R410A</b> (HFC)	0	2,090
<b>R32</b> (HFC)	0	675
<b>R454B</b> (HFC/HFO)	0	466

# LOW GWP REFRIGERANT TRANSITION

## SERVICE, REPLACEMENT AND INVENTORY GUIDANCE:

3. Existing R-410A systems remain serviceable and may remain in operation indefinitely. Service, repair, and component replacement for existing R-410A systems are permitted.
4. R-410A equipment CAN be manufactured and sold to support:
  - Service, repair, or component replacement of existing R-410A systems, provided such equipment is clearly labeled “FOR SERVICE ONLY”
  - New system installation in Canada
5. No requirement exists to scrap, recall, or return existing R-410A inventory.

ASHRAE Standard 34 Safety Classes

Higher Flammability	<b>A3</b> Propane, Butane	<b>B3</b>	↑ Increasing Flammability
Flammable	<b>A2</b> Methylene Flouride	<b>B2</b> Methyl Chloride	
Lower Flammability	<b>A2L</b> R-454B R-32	<b>B2L</b> Ammonia	
No Flame Propagation at 60° C	<b>A1</b> R-410A	<b>B1</b> Sulfur Dioxide	
	Lower Toxicity (OEL of 400 ppm or greater)	Higher Toxicity (OEL of less than 400 ppm)	
	→ Increasing Toxicity		

Most low GWP refrigerants approved for new equipment, such as R-32 and R-454B, are classified as A2L (mildly flammable) and subject to updated safety standards, primarily UL 60335-2-40, which address refrigerant charge limits and risk mitigation requirements. That said, A2L systems may require refrigerant leak detection and mitigation features depending on system design and application.

## REFRIGERANT DETECTION SYSTEM (RDS) AND SYSTEM RESPONSE:

- Leak detection sensor and RDS control board may be factory installed or field installed, depending on system design.
- When a refrigerant leak above a defined threshold is detected, the system automatically responds by diluting refrigerant concentration to reduce flammability risk.
- These safety functions are an integral part of A2L system design and must not be bypassed.

# LOW GWP REFRIGERANT TRANSITION

## NOTE ON CANADA:

This document reflects U.S. EPA requirements. As for 2026, Canada does not operate under the AIM Act and follows its own federal regulations and CSA safety standards. R-410A based products are currently permitted to be sold and installed in Canada in compliance with Canadian regulations and local codes.

## ADP IMPACTS:

- ADP offers products that are certified for Low GWP A2L refrigerant (R-32 and R-454B) for all Evaporator Coil and Air Handler product families.
- ADP FlexCoil products are certified to work for both R-32 and R-454B refrigerant.
- All A2L products are qualified for UL 60335-2-40. Refrigerant Detection System (RDS) sensor and control board are offered factory installation and/or field installation based on application.
- ADP continues to produce R-410A products for system service in U.S. and new system installations in Canada.

With a long legacy of matching products for a wide range of applications, ADP continues to offer broad A2L product compatibility and ratings with nearly all major OEM outdoor equipment brands across North America.

