

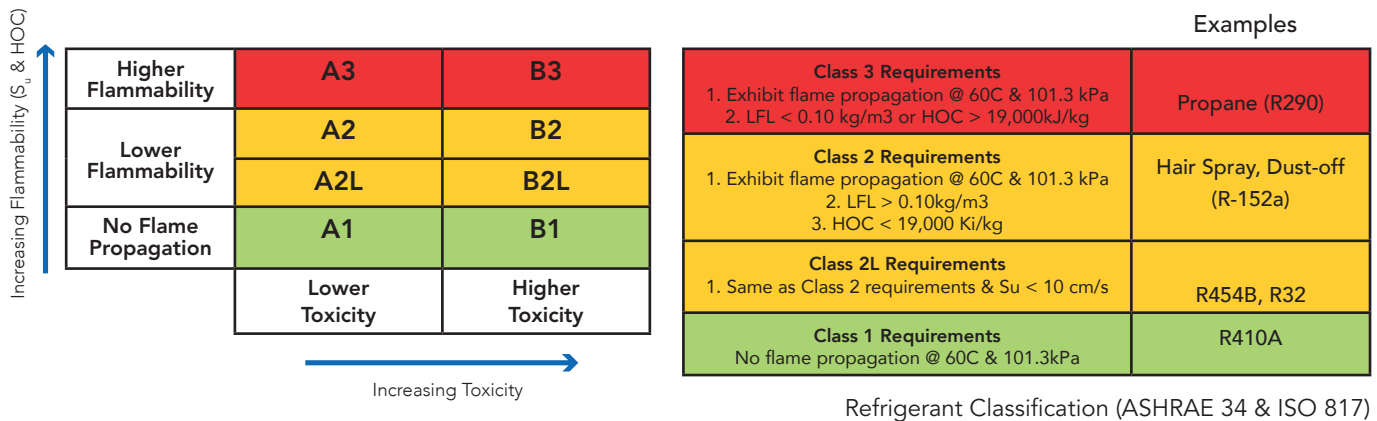
# Refrigerant Transition FAQ

## Why is American Standard transitioning from R-410A refrigerant?

The American Innovation & Manufacturing (AIM) Act directs the U.S. Environmental Protection Agency (EPA) to implement a phasedown of the production and consumption of HFCs by 2035. As part of this work the EPA has published a rule that beginning January 1, 2025, the U.S. Federal Government will require Residential HVAC equipment to use refrigerants with a Global Warming Potential (GWP) of less than 700. This legislation directly aligns with American Standard's commitment to energy-efficient solutions and reducing our carbon footprint.

## What does A2L mean?

Refrigerant Classification is defined by ASHRAE 34. The first digit refers to toxicity. The A is lower toxicity, the B is higher toxicity. The numbering 1,2L,2, 3 refer to flammability. The lower the number, the lower the flammability. 2L is the lowest flammability classification, refrigerants with this classification are difficult to ignite and non-explosive.



## What are the details of the proposed EPA transition rule?

On October 24, 2023 the EPA published the final AIM Act Technology Transition Rule which regulates the industry use of refrigerants with Global Warming Potential (GWP) above 700. Reference the table below for a summary of details.

| Category                              | Impacted Equipment   | Enforcement Rule  | Example   |
|---------------------------------------|--|---|---|
| R410A Self-Contained Units            | <ul style="list-style-type: none"> <li>Packaged Units</li> <li>Dehumidifiers</li> </ul>  | Installed by 12/31/27 Manufactured/Imported by 12/31/24   | A R410A packaged unit can be installed up until 12/31/27, if it was manufactured and in the U.S. before 1/1/25  |
| R410A Split Systems                   | <ul style="list-style-type: none"> <li>Split Ducted Systems</li> <li>Ductless Systems</li> </ul>   | Installed by 12/31/24   | A full system replacement in January 2025, example heat pump/air handler, must be an R454B or R32 system.   |
| R410A Split System Service Components | <ul style="list-style-type: none"> <li>Split Air Conditioners</li> <li>Split Heat Pumps</li> <li>Air Handlers</li> <li>Furnace Coils</li> <li>Ductless Indoor Units</li> </ul> | Partial system for service is allowed after 1/1/25* ('Service' label required for Manufactured/Imported after 1/1/25) | A homeowner's air conditioner compressor fails in January 2025, but the furnace and coil are working properly. The air conditioner may be replaced with an R410A service air conditioner, even though it's post 12/31/24* |
| R410 Equipment Exports                | Equipment manufactured in the U.S. for export  | Split Systems: No imposed restriction<br>Packaged/Dehumidifiers: until 12/31/27                                       | An R410A air conditioner manufactured in the U.S. can continue to be exported to Canada (no time limit). An R410A packaged unit and dehumidifier cannot be exported after 12/31/27.                                       |

\* Awaiting DOE guidance on if/how DOE Performance Ratings requirements will apply

† Installations in the state of California are subject to CARB restrictions on component replacements.

Additionally, resources from the EPA can be found here: <https://www.epa.gov/climate-hfcs-reduction/technology-transitions-program>. EPA Final Rule Fact Sheet: <https://www.epa.gov/system/files/documents/2023-10/technology-transitions-final-rule-fact-sheet-2023.pdf>

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**What products will be impacted by the required transition?**

All refrigerant-bearing products in our premium and value portfolios, including heat pumps, air conditioners, air handlers, coils, packaged units, ductless, and light commercial products will need to transition to support future refrigerant. Currently, we do not anticipate any major impacts to the furnace product portfolio.

**Will I be able to field convert equipment from R410A to a future refrigerant or from a future refrigerant design back to R410A?**

No, equipment cannot be field converted due to required safety regulations. All our products must meet UL/CSA safety requirements. Due to the change from an A1 to and A2L refrigerant, all systems require additional safety mitigations. These modifications are required to be factory installed to comply with UL safety where the design refrigerant must be present on the factory nameplate for both indoor and outdoor.

**Will we be able to complete outdoor only replacements with the future refrigerant models?**

Yes, while inventory of R410A products is available. However, full refrigeration system replacements will be necessary once inventory of R410A systems is no longer available.

**Will there be a dry ship loophole like we saw leveraged during the R22 to R410A transition?**

No, the dry ship 'loophole' exercised during the R22 to R410A will remain closed for the upcoming transition. For clarity, the resolution introduced does not ban dry shipping entirely, instead the DOE updated the ratings procedures for dry shipment which significantly reduce the ability to qualify.

**Will equipment model numbers change?**

Yes, we want to make it easy to identify equipment that will use the future refrigerants. All new ducted and ductless models will use a "5" for R-454B or "3" for R-32 to differentiate from the "4" used today to identify R-410A. Additionally, PTAC models will update the sequence design digit (digit 4) from an F to a G to symbolize the refrigerant change.

**What tools will be needed for dealers to service and install A2L refrigerants?**

It is important to only use A2L compatible tools when handling A2L systems. Impacted tooling includes gauges, recovery machines, vacuum pumps and leak detector. Additionally expect to use more nitrogen.

**Will the new R-454B designs allow for reuse of line sets?**

Line set reuse is permissible with proper purging. While R-454B designs may work best with smaller line set sizes, alternate sizing may be acceptable with reduced limits to rise & run length (or other performance limitations, see model installer's guides for specific details).

**When can we expect to see American Standard products designed for the future refrigerant?**

New products with low GWP refrigerant will begin shipping in early 2024. This excludes our PTAC portfolio, which is already impacted by California's early Low GWP requirements for portable cooling units. PTACs will begin shipping Fall 2023.

**Do these regulations affect Canada, in addition to the U.S.?**

Regulations developed by the U.S Environmental Protection Agency (EPA) affect only the United States. Environment Canada is expected to similarly enact changes for Canada, but no rulings have been proposed at this time. Continue to check back in and we will update as more information becomes available.

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**How can I stay up-to-date with the latest information regarding the transition?**

The Refrigerant Transition Playbook is a great place to explore resources and information ahead of and throughout the transition. The Refrigerant Transition Playbook is located here:

[ASDealerNet](#) > [Marketing Center](#) > [Playbook HUB](#) >

[American Standard Refrigerant Transition Playbook](#)

**What do AHRI ratings with “+ T-Stat” mean?**

You may see new system ratings in AHRI with “+ T-Stat,” similar to how you may see “+ TDR” or “+ TXV” today. This new designator simply means to use a standard 24V 2-stage thermostat for this combination.