Contractor FAQs

| What is an A2L refrigerant? | Named for their ASHRAE safety classification, A2L refrigerants are characterized by mild flammability, low toxicity, and low GWP (Global Warming Potential). A2L refrigerants offer similar operating characteristics to legacy refrigerants and are more energy efficient than R-410A. A2L refrigerants are acceptable due to their lower GWP per new regulations. |
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| What refrigerants are classified as A2L? | Current A2L residential refrigerants are R-454B and R-32. Existing refrigeration A2L refrigerants are R-454A, R-454C, & R-455A. |
| Are A2L Refrigerants Flammable? | A2L refrigerants need at least 1,000 times more energy to ignite than most A3-class (propane) flammable refrigerants. This means that A2L refrigerants are unlikely to ignite from a discarded cigarette or a space heater. Even naked flames struggle to ignite A2L refrigerants under test conditions. The "L" means they have a low burning velocity so, even in the event of ignition, the flame will likely burn slowly and self-extinguish. Extensive testing has been done with A2Ls and numerous heat sources, including cigarettes, lighters, power drills, & various household appliances: no heat source produced ignition. |
| Why is the government mandating a change to A2L refrigerants? | Lower GWP means that A2Ls are better for the environment A2Ls are more efficient R-454B has similar temperatures and pressures as R-410A |
| What can I use to replace R-410A? | Currently there is no alternative refrigerant to R-410A & equipment cannot be converted due to safety regulations. |
| How long can I sell R-410A compatible equipment? | The deadline to install R-410A systems is December 31, 2025 . The deadline to install self-contained R-410A products is December 31, 2027 . R-410A components can be installed indefinitely as a repair, but not installed as part of a new system. Learn more about the differences between products, systems, and components as defined by these new regulations in our <u>glossary of terms</u> . |
| What about new construction? | New construction follows the same refrigerant transition rules as replacement. |
| Do I need to take another EPA exam? | Contractors and technicians who already hold an EPA Section 608 certification are grandfathered in and do not need to take an additional exam. |
| Are A2L tanks different? | Yes! A2L and A1 refrigerant tanks have different colors. Traditionally, R-22 comes in teal / green cylinders, while R-410A comes in pink cylinders. A2L refrigerants come in silver cylinders with a red stripe near the top and large lettering of the refrigerant type. |
| Does anything change with recovery? | Contractors must continue to recover all refrigerants, including A2Ls. |
| Are there recordkeeping changes? | At installation, federal regulations require contractors to record the total refrigerant charge (unit charge plus additional charge at install) on the outdoor unit label. |



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| What new tools do I need? | Good news is that some of your tools may already be A2L compatible! Check with your Larson Representative or with the manufacturer of the tool. Charging Hoses - A2L refrigerant tanks will have left-handed threads. An adaptor or new hose will be needed to convert the standard ¼" flare to a left-hand thread. Gauges - Most digital gauges can be updated with the new A2L refrigerants Leak Detectors - A2L compatible if rated for flammable refrigerants Recovery Machines - A2L compatible if rated for flammable refrigerants (DC motor) Scales - No change Vacuum Pumps A2L compatible if rated for flammable refrigerants (DC motor) Switch located away from work zone |
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| Can I use A2L refrigerant in an A1 system? | Only use A2L refrigerants in equipment designed for A2L refrigerants. Do not use A2L refrigerants in existing A1 systems under any circumstance. For example, you cannot use R454-B or R32 in a system that uses R-410A or R-22. Retrofitting from one classification to another is a violation of the EPA SNAP Rule 23. |
| Can I top off a system with an A2L refrigerant? | Yes. This includes R-454B (which has a low 1.4°F glide) that can be topped off without the need to recover the entire refrigerant charge. |
| Will new units be pre-charged from the factory? | Yes! A2L units cannot be shipped without refrigerant and will be pre-charged when shipped from the factory. |
| How does installation change for new A2L systems? | Always follow proper installation and service procedures Ventilate work areas Purge line sets before brazing Braze with nitrogen flowing Mark the total refrigerant charge on the required label and record refrigerant-related service work Ensure leak detection sensors are properly installed and operational (NEVER bypass a sensor) Always weigh in the refrigerant charge Always use OEM parts to ensure safe operation Stay educated and train your staff Know your surroundings and your local codes Installation of jumper ducts or transfer grills to adjacent rooms can help increase room size for refrigerant concentration calculations |
| Can I reuse line sets? | Line set reuse is permissible with proper purging for R-454B equipment. Although, 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. Check the unit model installer's guide for specific details. Refrigerant line sets with A2L refrigerants will have smaller stub outs and smaller rated sizes than 410A. NOTE: If existing refrigerant lines are reused, replacing all the other components would still result in a new "system" for the purposes of the Technology Transitions Program. |
| What do AHRI ratings with "+ T-Stat" mean? | This new designator simply means to use a standard 24V 2-stage thermostat for this equipment combination. |