

BUYER'S GUIDE · 2026 EDITION

Alabama Ductless Mini-Split Buyer's Guide

A straight-talking eight-page guide for Birmingham-area homeowners evaluating ductless mini-split systems. Sizing, single vs multi-zone, brand comparison, install cost factors, humidity control, efficiency, and the questions to ask a contractor before signing.

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1. What a Ductless Mini-Split Actually Is

A ductless mini-split is a cooling and heating system that does not use ductwork. An outdoor condenser connects through a small refrigerant line set to one or more indoor air-handling heads mounted on walls or ceilings. Each head conditions the space it is in directly. No duct losses, no whole-house compromise.

Per the U.S. Department of Energy, ducted central AC loses 20 to 30 percent of conditioned air to the duct system itself before it reaches the living space. Ductless eliminates that loss by putting the air handler in the room being cooled (Energy.gov, Ductless Mini-Split Air Conditioners).

2. When Ductless Is the Right Answer

- **Homes without existing ductwork.** Historic homes in Leeds, Springville, and downtown Birmingham where adding ducts means destroying plaster walls.
- **Detached garages and workshops.** A 12,000 BTU single-zone unit cools a standard 2-car garage permanently. Window units die every few summers — ductless does not.
- **Bonus rooms over garages.** Never zoned into the main HVAC properly. One indoor head fixes the temperature gap.
- **Additions, sunrooms, and converted spaces.** Extending existing ductwork would starve the rest of the house.
- **Two-story temperature imbalance.** Upstairs bedrooms 8–12°F warmer than the thermostat — per-room heads solve it.
- **Short-term rentals.** Independent per-unit temperature control without plumbing a second central system.

3. Sizing — The Single Most Important Decision

Oversized systems short-cycle, run inefficiently, and fail to dehumidify. Undersized systems run continuously and still cannot hit setpoint. Correct sizing is non-negotiable.

Space	Square Footage	BTU Target
1-car garage	250–300 sq ft	9,000 BTU
2-car garage (standard)	400–576 sq ft	12,000 BTU
2.5–3-car garage / large shop	576–800 sq ft	18,000 BTU
Large workshop or pole barn	800–1,200 sq ft	24,000 BTU
Master bedroom (well-insulated)	200–300 sq ft	9,000 BTU
Large living / great room	400–550 sq ft	12,000 BTU

Add 10–20% capacity for uninsulated spaces, metal-roof garages, or significant south-facing solar exposure common in Alabama.

4. Single-Zone vs Multi-Zone

Single-zone: one outdoor condenser, one indoor head. The right answer for garages, one-room additions, and single-room problems. Simpler, cheaper, more efficient at part load.

Multi-zone: one outdoor condenser, two to eight indoor heads. The right answer for homes replacing central AC entirely or for multi-room coverage in homes that lack ducts. Higher upfront cost; each zone controlled independently.

The decision rule: if you need two or fewer zones, two single-zone systems are often cheaper, more efficient, and more reliable than one multi-zone with two heads. If you need three or more zones, multi-zone is usually correct.

5. Brand Comparison — The Four Ductless Leaders

Brand	Known For	Alabama Fit
Mitsubishi Electric	Widest Alabama parts network; M-Series standard.	Default recommendation for most installs.
Fujitsu (Halcyon)	Quietest indoor heads in the category.	Best for noise-sensitive bedrooms and nurseries.
Daikin	Industry volume leader. Dedicated dehumidification mode.	Best for humidity-critical applications.

Brand	Known For	Alabama Fit
LG (Art Cool)	Best-looking indoor head; competitive pricing.	Best for designer installs and budget multi-zone.

Sources: Mitsubishi Electric product specifications; Fujitsu General USA; Daikin Comfort; LG Business HVAC product literature.

6. Install Cost Factors

We do not publish fixed prices because the real cost depends on your space, electrical panel, line-set routing, and unit selection. Industry-benchmark ranges, per HomeGuide and Energy.gov 2024 averages:

- **Single-zone installation:** \$3,000–\$6,000 total installed.
- **Multi-zone installation:** \$5,000–\$15,000+ depending on zone count and complexity.
- **Garage mini-split (2-car, 12,000 BTU):** typically within the single-zone band.

What drives the range:

- Electrical panel capacity — a dedicated 240V circuit may require panel work.
- Line-set length — runs over 25 feet or through difficult ceilings cost more.
- Indoor head type — wall-mount cheapest, ceiling cassette or ducted slim more expensive.
- Brand and model — higher SEER2 ratings cost more upfront but return through utility bills.
- Electrical + code work — permits, load calculations, condensate pump where gravity drainage is not possible.

7. Humidity Control — Why It Matters in Alabama

Birmingham-area summer humidity routinely runs above 80 percent. A correctly sized AC system removes humidity as a byproduct of cooling, but an oversized system short-cycles before it has time to pull moisture from the air. A properly sized ductless head, especially on a variable-capacity inverter compressor, modulates output to match load — which lets it run long enough to dehumidify at setpoint rather than cooling past setpoint and shutting off before the moisture comes out.

For homes with extreme humidity problems, a whole-home dehumidifier (e.g., AprilAire E-Series) paired with a ductless system delivers the best comfort outcome in Alabama.

8. Efficiency — SEER2 and Energy Star

Modern ductless systems are rated in SEER2 (Seasonal Energy Efficiency Ratio 2, the 2023+ federal replacement for SEER). Higher SEER2 = more cooling per watt of electricity.

- Federal minimum SEER2 for ductless (2024+): 15.0
- Mid-tier installations: 18.0–20.0 SEER2
- Premium high-efficiency: 22.0–27.0 SEER2
- Energy Star certification threshold for ductless: 16.0 SEER2 minimum

Per Energy Star, ductless systems that earn the certification use 15 percent less energy than federal minimum models (Energy Star Ductless Heating & Cooling product criteria).

9. Questions to Ask a Contractor Before Signing

1. Are you going to perform a Manual J load calculation before sizing the system?
2. What brand and model are you proposing, and what is the SEER2 rating?
3. Is the quote for labor and equipment or do I pay electrical separately?
4. Where will the line set run and will you use line-set covers outside?
5. What is the manufacturer warranty term on parts, and what is your labor warranty?
6. Are you pulling a permit and is the install inspected by the jurisdiction?
7. What is your post-install service timeline if something goes wrong in the first 12 months?
8. Can I see the AHRI certificate for this system (this is the federal efficiency verification)?

A contractor who cannot answer these directly is not the contractor for a \$5,000+ install.

10. Red Flags to Walk Away From

- No written estimate before work begins.
- Verbal-only warranty claims.
- No Manual J sizing.
- No EPA Section 608 certification on the technician handling refrigerant.
- Pressure-sales tactics with limited-time discount language.
- No AHRI certificate provided for the equipment installed.

Emergency AC Repair Service · 2200 1st Avenue North · Birmingham, AL 35203 · (205) 206-5252 · emergencyacrepairservice.com

Serving Birmingham's east corridor — Leeds, Moody, Pinson, Clay, and Springville. Licensed, NATE-certified, EPA Section 608 certified. AL HVAC #MECH-2024-0847.

This guide is informational. It is not a substitute for a licensed HVAC contractor evaluating your specific home. All figures cited from public industry sources (Energy.gov, HomeGuide, Energy Star, AHRI, Mitsubishi, Fujitsu, Daikin, LG).