

A cold garage can make winter projects miserable, and there are two common ways to warm one: a ductless mini split or a propane heater. They do not carry the same risks. A mini split heats without burning fuel inside the garage, while a propane heater produces combustion gases that must be managed. But “electric” does not automatically mean risk-free, and propane heaters vary widely in how they’re designed to vent.

For many attached garages and regularly occupied workshops, a correctly installed heat pump mini split is the safer everyday choice because it avoids indoor combustion and carbon monoxide risk from the heater itself. A propane heater may make sense for occasional, fast heat, but only when its type, ventilation, installation, and use comply with the manufacturer’s instructions and local rules. Here’s how to compare them without overlooking sizing or electrical requirements.



Quick comparison

Factor	Mini split heat pump	Propane heater	Combustion in the garage
No;	heat moves indoors from outdoor air	Yes, unless the system is specifically designed to isolate combustion from the room	Carbon monoxide risk
No	combustion-related CO from the heat pump itself; other garage sources can still produce CO	Potentially significant, especially with unvented or improperly vented equipment	Electrical needs
Model-specific; some smaller units use 115V, many require a 230V dedicated circuit	May use propane as the main fuel, but often still needs electricity for a fan or controls	Best fit	Frequent use, steady comfort, and occupants who want to avoid indoor combustion
Intermittent heating where an approved, properly installed heater suits the space			

Why a mini split often has the safety edge

A mini split heat pump does not make heat by burning propane or natural gas in the garage. Its outdoor condenser extracts heat from outdoor air and transfers it indoors through refrigerant lines. That means the heater itself does not add combustion exhaust or carbon monoxide to the room. This is an important advantage in an enclosed space where people may work, store materials, or leave a vehicle running briefly.

That does not make a garage CO-proof. Vehicles, generators, and other fuel-burning equipment can still produce carbon monoxide. Never run a car or generator in an attached garage, even with the door open. Install working

carbon monoxide alarms where required and follow their placement instructions. An alarm is a backup—not a substitute for safe equipment and habits.

Electrical safety is part of heat pump safety

Before choosing a mini split, check the actual installation manual and electrical data for the exact model and capacity. Some smaller units are designed for 115V service; others require 230V. Voltage alone does not tell you the circuit size: the manual's minimum circuit ampacity (MCA) and maximum overcurrent protection (MOCP), along with local electrical code, determine the wiring and breaker requirements.

Many mini splits require a dedicated circuit. Do not assume you can plug a unit into a convenient garage receptacle or share a circuit with a freezer, lights, or tools. Check whether the panel has capacity for the required breaker and whether the wiring route and disconnect meet local requirements. If you are unsure how to read the nameplate, have a qualified electrician assess the panel and installation. A 230V unit is not automatically better or more efficient than a 115V unit; choose based on the model, heating load, available electrical service, and installation requirements.

Propane heaters: ventilation and carbon monoxide risk

"Propane heater" covers very different equipment. An unvented heater releases combustion products into the space it heats. A direct-vent or other vented appliance is designed to send exhaust outside, but still needs to be installed and maintained as specified. Do not treat these types as interchangeable, and do not assume that opening a garage door or adding a fan makes an unvented heater safe.

Combustion can produce carbon monoxide, a colorless, odorless gas that can be fatal. It can also add water vapor and other combustion byproducts to the garage. CO risk depends on the appliance, condition, installation, ventilation, and how it is used; a heater's safety shutoff is not a guarantee against every hazardous situation.

Garage-specific hazards to consider

- **Flammable materials:** Gasoline, solvents, paint, and aerosols may be present in garages. Keep heaters and ignition sources away from stored fuels and follow the required clearances.
- **Vehicle exhaust:** A heater does not make it safe to idle a car indoors. Exhaust can accumulate quickly, including when the garage door is partly open.
- **Combustion air and exhaust:** Vented equipment needs the correct intake and exhaust arrangement. Do not block vents, improvise venting, or alter the appliance.
- **Clearances and mounting:** Follow the manufacturer's specified distances from walls, ceilings, vehicles, and combustibles. Secure portable equipment against tipping and keep it out of traffic paths.

For any fuel-burning appliance, read the manual, follow local code, and use a qualified installer where required. Ask your local building department or a licensed contractor whether the proposed heater is allowed in your garage. A carbon monoxide alarm is prudent protection, but it does not replace proper garage heater ventilation, correct venting, or safe operation.

Get the BTU size right for a garage

Garage sizing is not the same as sizing a bedroom or living room. Garages often have less insulation, more air leakage, a large overhead door, and frequent door openings. Ceiling height matters too: a tall garage has more air

volume to heat, and warm air can collect overhead. A unit sized from an interior-room BTU chart may struggle to keep up—or may cycle inefficiently if oversized.

As a rough starting point, a garage may need **30% to 50% more heating capacity than an interior room of similar floor area**. Treat that as a screening heuristic, not a sizing formula. A well-insulated, air-sealed garage in a mild climate may need less; a drafty garage with a tall ceiling and a large door may need more. Local winter design temperatures and the temperature you want to maintain also matter.

What to assess before buying

- **Insulation and air leaks:** Check the ceiling, walls, garage-door panels, weatherstripping, and gaps around doors and penetrations. Air sealing can improve comfort and reduce the required heat output.
- **Ceiling height and layout:** Note the actual height, open rafters, obstructions, and where people work. Heat distribution may matter as much as the unit's nominal capacity.
- **Door use:** A garage door that opens often can dump heat quickly. Consider how the space is used, not only its square footage.
- **Cold-weather output:** Compare a mini split's published heating capacity at low outdoor temperatures—not just its headline capacity at a mild test condition.
- **Setpoint and occupancy:** Heating an occasional workshop session to a comfortable temperature differs from maintaining living-room-like warmth all day.

Ask the installer for a load calculation that accounts for the garage, insulation, ceiling height, local winter conditions, and desired temperature. Do not compensate for poor insulation by guessing at a much larger unit. Oversizing can create uneven comfort, while undersizing may leave the space cold during the weather when you need heat most.



SEER2, HSPF2, and what they mean for running costs

SEER2 measures seasonal cooling efficiency; **HSPF2** measures seasonal heating efficiency. For a garage heating decision, HSPF2 is the more directly relevant rating, though both can be useful if you also plan to cool the space. Higher ratings generally indicate greater seasonal efficiency <https://momhomeguide.com/best-diy-mini-split-heat->

[pump-garage-heating-2026/](#) under the rating test conditions, but they do not guarantee a particular bill or performance in every climate.

Heat pumps move heat rather than generating it by burning fuel, so they can deliver more heat energy than the electrical energy they consume under suitable conditions. Efficiency and heating capacity can drop as outdoor temperatures fall, and models differ in how well they perform in cold weather. Review the manufacturer's low-temperature capacity data and compare it with your climate and intended use.

To estimate operating costs, compare the unit's expected electricity use and your local electricity price with the propane heater's fuel consumption and propane price. Account for the hours you will run it, your target temperature, and how much heat escapes through the garage. A higher HSPF2 may help lower seasonal electricity use, but installation quality, sizing, and air sealing also have a major impact.

Zone Air vs. MRCOOL: compare the installation details

Zone Air and MRCOOL are names homeowners may encounter while researching ductless systems and DIY installation options. Rather than assuming one brand is best for every garage, compare the exact model and installation package. Check the heating capacity at your local winter design temperature, electrical requirements, included line-set length, warranty terms, and who is responsible for installation and service.

With MRCOOL DIY models, pay close attention to the specific model's installation instructions and line-set arrangement. A longer line set is not automatically better if the extra length has to be coiled behind the condenser; that can make for a messy installation and may conflict with the manufacturer's requirements. Confirm the permitted line length, minimum and maximum elevation difference, and any restrictions on shortening or handling the lines before buying.

When comparing Zone Air options, ask for the same practical details: model-specific low-temperature performance, electrical data, included components, and the scope of installation support. Product availability and packages can vary, so verify current specifications rather than relying on a brand name alone. For either option, a DIY label does not eliminate the need to follow electrical code, mount the outdoor unit securely, protect the refrigerant lines, and meet manufacturer instructions. Some work may require a licensed professional or permit in your area.

Outdoor placement: condenser pad or wall brackets?

A mini split's outdoor unit needs stable support and adequate airflow. A ground-mounted **condenser pad** can be a straightforward choice if the site is level, well drained, and protected from snow accumulation and impacts. **Wall brackets** can lift the unit above typical snow depth and reduce the chance of damage from yard equipment, but the wall and fasteners must support the load and vibration.

Neither option is universally better. Follow the model's required clearances around the coil and service panels, keep snow and debris from blocking airflow, and provide a route for condensate and defrost water that will not create a slippery walkway or ice hazard. Check the manual for local installation considerations, including wind and snow exposure.

Which one should you choose?

Choose a mini split when...

- You heat the garage regularly and want steady comfort.

- You want to avoid combustion products from the heater inside the garage.
- Your electrical panel can support the correct 115V or 230V circuit—or you are prepared to have it upgraded.
- You can install the indoor and outdoor units according to the manual and protect them from garage hazards and weather.

Consider propane only when...

- The specific heater is approved for the intended location and use.
- Its ventilation or venting arrangement meets the manufacturer's instructions and local requirements.
- You can maintain clearances, keep it away from flammables, and use it without creating an exhaust hazard.
- You understand that a CO alarm is a backup and that vehicle exhaust remains a separate danger.

For a second opinion on contractor bids or project scope, Angi can be one place to look for local service professionals; still verify licensing, insurance, permits, and experience with garage installations directly.

Bottom line

For a garage that is heated often, a properly sized and correctly installed mini split is usually the safer choice because it avoids fuel combustion in the room. Its heat pump safety depends on sound electrical work, correct clearances, and an installation suited to the garage and climate. Propane can provide useful heat, but the heater type and ventilation are critical: carbon monoxide risk is not something to manage by guesswork or by leaving the door cracked.

Before buying, assess insulation and ceiling height, use garage-specific sizing rather than an interior-room chart, and confirm the exact circuit and breaker requirements. A careful load calculation and manual check are less exciting than choosing a heater—but they are what make the finished garage safer and more comfortable.