



Ductless Heat Pumps

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Ductless heat pumps are on the rise and though we've seen HVAC trends come and go, Ductless has moved beyond any trend. Customers have many questions regarding these systems, so I pestered our owner and our techs and I got the run-down for you; I even learned a few things! First, which applications are best for Ductless? Let's go over them:

- Conversions with No Ductwork - It may seem obvious, but many older homes and duplexes still have electric resistant heat (baseboards, cadet heaters, ceiling heat) or free-standing gas stoves and console heaters that don't use ductwork. Installing ductwork is always an option, but retrofitting a duct system is labor intensive and costly. Which is why ductless is such a dream in these situations.
- Smaller Spaces - Sometimes, you need heat in a small shop, a studio, or just one room in the house and this is the way to go! Efficient and made for small spaces!
- Rentals - Believe it or not, we install these in many duplexes and one-room apartment situations where the square footage is cozy and easy for a ductless to handle. [The Energy Trust of Oregon](#) is offering amazing incentives for these units when installed in rentals right now. As of the day this article was written, they were offering \$1,800 to install a ductless in your rental property. Talk about incentive!

This doesn't mean that homes with more square footage won't benefit from a ductless system by any means! We'll talk about that as well, don't worry! But what exactly do people love so much about these systems? I had the same curiosity; what is the draw here? Well, this is what I gathered:

- Colder Temperatures - ductless heat pumps (as opposed to their ducted relatives) in some cases can heat up to 100% efficiency down to zero degrees! This is just unheard of with unitary heat pump systems that will heat at varying efficiencies down to freezing at best before the back-up heat comes on; they just can't keep up in colder temperatures. (If you're using electric back-up heat, this can be very expensive) This is where the ductless shines in winter and why a lot of people are opting for these systems where the weather is colder for longer periods throughout the year. Ductless units have no back-up strip heat as they don't ideally need it in freezing temperatures so there are no surprise electric bills when it gets cold.
- No Energy Loss - Ducted systems have to factor in a certain amount of energy loss through the ductwork. Yes, insulation helps and recuperates much of this loss, but again, the cost is there. Ductless units blow air straight into the living space, eliminating even the *thought* of heat loss through ducts.
- Cleaner Air - Consider the amount of debris that can accumulate in ductwork; that ductless air blowing straight into your space won't have to pass over years of dust and who knows what that may have been there since the home was built. New fear unlocked.
- Temperature Variation - Ducted equipment has one thermostat and one set temperature for the entire home. With Ductless, you have more options and this is where houses with more square footage come into the equation. If you install a separate head for the Master Bedroom, you can keep your bedroom warmer or cooler as you desire without affecting the rest of the home. This can be cost effective and convenient. Each indoor head comes with its own remote with thermostat and can be set to your desire. Some remotes can even work interchangeably with indoor heads for convenience. This means you can tuck away the extra remotes just in case!

There is no perfect solution for anything, and you know I have to include the drawbacks as well, right? I don't like being a Negative Nancy but here we go with some things to consider when weighing your options:

- Wall Units - While I can sing their praises and I know all too well their benefits, those units on the wall are a decorating nightmare. As the one who 'makes' our home, I would not want to have to decorate around that unit and I wouldn't want it running above my head while I had coffee with friends. It's a personal preference.

- Open Air - Ductless systems are designed in such a way to bounce air throughout the space so that all rooms are heated. If you have rooms that have the door shut often, those spaces will not get heat. This is why many people opt to install more than one head, which increases the size and capacity of your outdoor unit and brings the cost up a bit.
- No Back-Up Heat - Of course, back-up heat can be expensive if you're using straight electric heat, but ductless units have no back-up *at all*; if your unit goes out for any reason, you will need to keep some heaters on hand that you can plug in until a technician can get out to diagnose and fix the unit. In some cases you will have to wait for parts to be shipped; it can be very inconvenient.
- Washable Filters - Now this makes maintaining these units very easy and sustainable since you can wash the filters and put them back in regularly. However, we have heard rumors that over time, as these units age, that they develop a 'smell' and it is impossible to trace back to anywhere and no amount of washing those filters helps. Why? The reps can't tell us. Have we run into it yet? No. But I felt I had to include this bit of information here for full disclosure.

If you run into those ready-to-go homeowner ductless kits that you can put in yourself, proceed with caution. Someone certified to work with refrigerant still has to weld up your refrigerant lines and start up your equipment. Stephens Heating has a policy not to start-up these systems as we can't guarantee the installation and most companies are following this same rule to protect themselves. Rebates and tax credits require documentation that your system was installed by a certified contractor and I'm sorry but no, we won't provide that if we didn't install the system.

There are many brands of ductless out there and most of them are very comparable. As always, we encourage you to get 3 estimates minimum and to go with the contractor that makes you most comfortable. Overall I would have to say that ductless heat pumps are a wonderful addition to the HVAC world and we're glad they're here to stay.