

Whole House Mechanical, LLC



While an air conditioner or heat pump provides the home with comfort there are two ways the conditioned air is distributed throughout the home – a forced-air system (ducted) or a ductless system. The typical home has a forced-air system but there are homes that do not have air ducts such as those with radiant heat systems or those that heat with fossil fuels. In such homes a ductless system can be installed to provide air conditioning and also heating.

A ductless system is just what it sounds like – a self-contained system that does not have air ducts to distribute the conditioned air. The most common ductless system is a window air conditioner. The compressor, condenser, and evaporator coil are all contained in the single unit. These units work well to cool a specific room. The downsides to these units are the room to cool must have a window that will open and is large enough to fit the unit, the window view is blocked, and the units tend to be noisy.

A Packaged Terminal Air Conditioner or PTAC is a thru-the-wall ductless unit most often found in hotel rooms. The units simply slide through an opening cut in an exterior wall making installation quick and easy. With the availability to both cool and heat, these units are a great option for large rooms such as a three seasons room.

Because a window air conditioner and PTAC must be installed on an exterior wall, their installation location is limited. To cool or heat an interior room a ductless split system is the perfect solution. Available in either cooling only models or heat pump models, the ductless split system operates just as a standard air conditioner and can be installed on an interior or exterior wall. The compressor and condenser coil are housed in the outdoor unit, which is connected by a refrigeration lineset to the indoor air handler to provide the room with conditioned air. Only a 3" hole is cut for the installation of the lineset so there are no large holes in the wall or windows to block. The lineset can be hidden out of sight within the wall or attic making them easy to install in almost any room of the house. With sleek designs and several indoor unit options including wall mount, ceiling mount, and standing floor units, a ductless split system will blend well with any room layout and décor. And unlike a window air conditioner, ductless split systems are very quiet with the indoor air handler decibel levels barely louder than a whisper. Ductless split systems are also ultra efficient with Seasonal Energy



Efficiency Ratings (or SEER) ranging from 13 SEER to 26 SEER. Most units above 16 SEER are Energy Star Rated and eligible for the Federal Tax Credit. Not only will the unit save money on utility bills and taxes, the unit also uses an environmentally friendly refrigerant – saving some green in three ways. A ductless split system is able to provide heat or cooling to more than one room at the same time. While a single zone system serves only one room with one air handler and outdoor unit, a multi-zone system can have up to four handlers each serving a different room but all connected to the same outdoor unit. Each air handler operates independently of one another so each room can be set at a different temperature.

Mitsubishi Electric is one of the industry leaders in ductless split systems. With advanced technology such as indoor heat-seeking sensors, inverter compressor operation, and hyper heating, which allows the heat pump to heat even with outdoor temperatures of -13° F, the Mitsubishi Electric ductless split system is a great system to have in any home. If you currently do not have air conditioning or would like to cool or heat a specific area, a ductless system is a great option in your existing home, office, or studio. A ductless system is also perfect if you are building a new home, adding an addition, or converting an area of the home into a living space without the need of adding ductwork. Whether you may need a single system for a specific area or multiple zone system for the entire home, ductless split systems will provide you with exceptional comfort.

To learn more about ductless split systems call Whole House Mechanical and talk with a Project Engineer or visit Mitsubishi Electric at www.mehvac.com.