

About Heat Pumps...

1. What is a heat pump?

A heat pump, also known as a heat pump air-conditioner, is an extremely efficient system that will:

- heat your home in the winter
- cool your home in the summer
- dehumidify the air
- filter the air as it is circulated.

Heat pump technology has been around for many years and has been thoroughly proven in commercial and industrial applications. But it's thanks to developments in modern electronics and manufacturing that has enabled heat pumps to be produced now at much lower prices. This is why heat pumps are becoming a very popular alternative to traditional heating methods.

2. How efficient are heat pumps compared to electric heating?

Heat pumps are up to 4 times more efficient than electric heating.

If \$100 of electricity was spent in a month running a 2.4 kilowatt electric heater, a heat pump also producing 2.4 kilowatts of heat would only use \$25 - \$30 of electricity during the same one month period.

3. How noisy are heat pumps?

This would be the most commonly asked question. It's very hard to explain noise on a sheet of paper and even decibel ratings don't make any sense to most of us.

The best way for me to explain this would be that with the Daikin brand, we have never had any complaints about noise.

The Daikin indoor units that are installed into bedrooms have a quiet mode and they are extremely quiet.

The Daikin outdoor units have 2 x layers of insulation around the motor to dampen the noise as much as possible.

4. Why do Heat Pumps vary so much in price?

Although all heat pumps use the same basic principles to heat and cool the air, there is a huge difference in technology used in the more expensive brands like Daikin compared to the cheap Chinese manufactured products sold through budget retail chains.

Also be aware that retailers of the cheapest brands tend to advertise the heat pump exclusive of installation costs.

About Installation

1. How easily can a heat pump be installed into an existing home?

The majority of new heat pump installations, either small systems or large systems, are into existing homes.

There can be more considerations with installing a heat pump into an existing home, but generally it is not a limiting factor. A visit to your home would be necessary so that we can advise you on what options are available.

2. How long do heat pumps take to install?

The installation of a basic heat pump system into an existing house can usually be done inside of a day.

Multisystems and ducted systems take longer.

3. What if my house is still at the design stage?

If the house is still at the design stage we can work accurately from your plans and specifications to size the correct system.

While the house is being built, we can ensure the necessary electricity supply and unit pipe work are installed before the walls are lined.

Then once the house is nearing completion, we would return and install the heat pump units.

Technical Questions...

1. What are the different types of heat pump systems?

Single split systems: \$2500 - \$5000 depending on style of unit and capacity required.

- Each installation consists of one outdoor unit & one indoor unit
- Suitable for single areas like a living area
- Indoor unit can either be a highwall or floor mounted style.

Super Multi systems: Cost from about \$10,000 and upwards depending on the specification. Can cost more or less depending on specification.

- Installation consists of one outdoor unit and either two, three or four indoor units
- Indoor units can be highwall, or floor mounted
- Each room can be independently controlled, saving you money in running costs.

Centralised Ducted systems: huge variation in cost depending on specification \$10,000 - \$20,000+

- Installation consists of one outdoor unit and one ducted air-handling unit
- Suitable for multiple rooms
- The ducted air-handling unit is mounted within the ceiling space or under the floor.
- Flexible insulated ducting distributes the air to the different rooms of the house
- The system can be zoned. For example, air can be distributed to the living areas during the day, then switched over to the bedrooms at night
- The big disadvantage of a centralised ducted system is the lack of temperature control between the different rooms.

It is important to note that with ducted systems, one or two floor level return air ducts will be required. If you are building a new house, these need to be designed into the house during the planning stages.

These are the most popular system types, although there are other ways to configure a system.

2. What are the most important technical features?

R410A refrigerant – this is the new global standard in air-conditioning refrigerant as it is not harmful to the ozone layer.

Inverter variable speed technology – this is probably the biggest breakthrough in technology over the last few years.

Inverter heat pumps have electric motors that will either speed up or slow down depending on demand. For example, when a cold room is being heated up, the motor runs at full speed. As the preset temperature is reached, instead of stopping the motor slows down to a very low speed to maintain the required temperature. This is important for efficiency and reliability.

3. Why is it important a heat pump is sized correctly for my home?

Sizing heat pumps should never be guessed at.

If a heat pump is too small, it will run all the time, using extra electricity, plus it will not be able to meet the heating demand when you need it most - during the coldest days of winter.

If a heat pump is over sized, it will give you sufficient heating and cooling, but it will cost more to purchase.

There are many more factors to consider when sizing a heat pump system. The first step we take is to visit your home. This allows us to discuss and understand your specific requirements.

We then take all the necessary measurements and offer our expert advice on what systems will be best suited to your home. Our next step is to use our specialised computer software to accurately calculate the size of heat pump most suitable for your home.

This is the only way to ensure that the system we recommend is the most energy efficient and cost effective solution available to you.

About Auckland Heat Pumps Ltd...

1. Who is Auckland Heat Pumps Ltd?

Auckland Heat Pumps Ltd is a privately owned company established in 2004 by Mike Plain.

A qualified refrigeration and air-conditioning engineer, with over 20 years experience working with domestic and commercial heat pump air-conditioning systems in New Zealand and overseas. Mike wanted to establish a heat pump installation business that delivers the best service possible in terms of quotations, installation and after-sales care.

It is essential that Auckland Heat Pumps provides the best quality heat pumps as well, and for this reason they choose to deal solely with Daikin Heat Pump Air Conditioners from Japan. Daikin have been mass producing domestic air-conditioners since the 1950's and are world leaders in developing heat pump technology.

To find out more about Auckland Heat Pumps [click here](#)

2. Why Daikin heat pumps?

Lots of reasons, here are just a few:

- Daikin have been manufacturing domestic heat pumps for over 50 years
- They are the largest heat pump air-conditioning manufacturer in Japan
- Daikin specialise in heat pumps, and only manufacture heat pump air-conditioning equipment
- They spend over 100 million pounds per year on research and development
- Daikin heat pumps are trialed in the Japanese market before being released into the global market
- Their heat pumps are extremely reliable
- They have an extensive range to suit a wide range of customer needs
- Daikin provide excellent back up service
- Daikin are the only air-conditioning company authorised to use the Sensitive Choice symbol that helps asthma sufferers identify products more suited to their needs
- Their NZ head office, distribution and technical support are in Auckland.