

Enviro Master Heat Pump Guide

How Heat Pumps Work

How to Save up to 80% on Your Heating Bill

Which Heat Pump Is
Best For Your Home?



Worry Free Climate Control with Enviro Master

Be comfortable all year round... at the push of a button

Worry-free climate control for your home with Enviro Master

Our mission is to keep the temperature of your rooms comfortable ... at the push of a button

Enviro Master Ltd is a locally owned and operated Christchurch air conditioning and heat pump company. We have the city's widest range of heat pumps, including all the leading brands such as Panasonic, Fujitsu, Mitsubishi, Daikin and others. Most importantly, we have no affiliation with any particular brand. This means you can trust us to give unbiased advice on the differences between each product. We will recommend the most energy-efficient and cost-effective system for your situation, with absolutely no vested interest.

Experience and expertise you can trust

Enviro Master Ltd has been in business in Christchurch since 2002. When you deal with us, you will get the benefit of our many years' experience as specialist heating and refrigeration engineers. We specialise particularly in fitting heat pump systems into existing homes and businesses.

All our sales people are qualified refrigeration engineers. To help you choose the right system, one of our experts will visit your home or business to assess your situation and give professional advice. They will take time to answer your questions, to make sure you are 100% happy before you decide on a system.

Your system will be installed by experienced staff who you can trust to do a truly professional job. We offer a 100% guarantee, covering not only the equipment but also its installation and delivery. We will also take time to teach you how to operate your new heat pump, which is very important for its long-term efficiency.



Our follow-up service is second to none

For your ongoing peace of mind, we will contact you every three months after we install your system, to make sure everything is working correctly. By picking up any faults quickly, we will help prolong the life of your system and reduce your long-term operating costs.

Our experienced engineers can service all the major brands of heat pump, according to the manufacturers' guidelines. This includes important (but often overlooked) requirements such as:

- sanitising the air handlers, to kill any bacteria in the system;
- checking and cleaning drains and condensation pumps, to prevent water drips;
- cleaning and polishing the outside condensation unit to help the system resist corrosion.

You can rest assured your system will always be reliable, hygienic and as energy-efficient as possible.

Why not visit our showroom?

You are welcome to visit our showroom at 41A Shakespeare Road, Waltham, to see our range of heat pump products. You will be able to visualise how various brands might look and hear the systems running. For a free on-site consultation, **call us on 366 0525.**

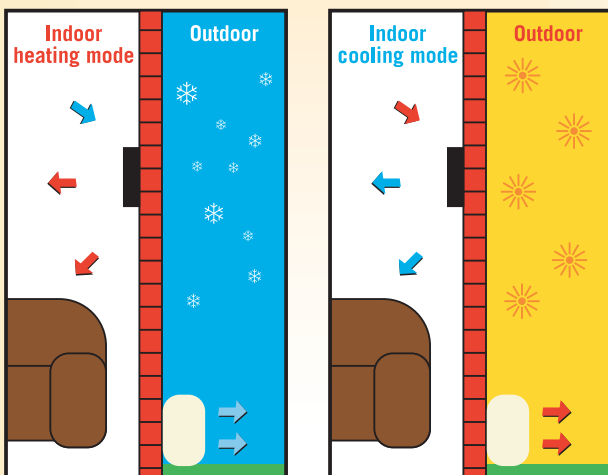


How heat pumps work

Heat pumps simply transfer free heat (not air) from one place to another, just like your refrigerator does. The heat that rises from the back of your fridge is coming from inside. An evaporator coil extracts warmth from the air inside, and transfers it out into your kitchen through the condenser coil in the back.

Heat pumps work in the same way. Two coils, one inside your home, and one outside are linked to draw warmth from the outside air (even on a cold Kiwi winter's night) and transfer it into your home.

That's a major advantage over electric or gas heaters, as heat pumps have no heating elements to burn energy. Then, at the push of a button your heat pump can work in reverse, acting as an air conditioner to pump heat out of your home - reducing humidity and keeping it fresh and cool in summer.



It's important to choose the right heat pump for your needs

Get expert advice first

There are several different types of heat pump and it's wise to get professional advice, to make sure you choose the best system for your home. At Enviro Master we offer a seven-step assessment process, to ensure you get the most energy efficient and cost effective system for your needs. **We find there can be up to 1kw of heat difference per hour by using one brand or model over another.** This can add up to a lot of money if you make the wrong choice.

Five types of heat pump ... which is best for you?

High wall systems

These are mounted high on the wall and are the most cost-effective and energy-efficient heat pumps. They are the most commonly used in New Zealand homes and vary in size and capacity.

Floor console systems

There are two shapes of floor console systems. Some blow out air at the top only, while others distribute air at both floor level and the top when on heating.

Cassette Systems

These are mounted in the ceiling space with just a thin fascia exposed below the ceiling. They can blow in up to four directions at once.

Ducted Systems

These systems are completely hidden, usually within the ceiling space. Air is then ducted into each room through vents positioned in the ceiling providing a constant temperature throughout the house.

Multi Systems

These systems have several different indoor units. There is typically one outdoor system and up to four indoor units. The indoor units can be high walls, floor consoles, cassettes, ducted systems or a combination of these.



The right advice

Judy and Graham Greengrass had a heat pump installed in their home by Enviro Master Ltd.

Judy says:

"We heard about Enviro Master through Graham's workmates. We got several other quotes but it was obvious when he walked in that Grant knew what he was talking about. Not only did he explain where the unit should go but why, and his price was very good."

"We didn't feel as if Grant was pushing us into buying, and he gave us precisely what we needed. We've had our heat pump for 18 months now and it does exactly what Grant said it would do."

"Enviro Master did an amazing job. When they installed it, they left the house spotless. You couldn't even tell they'd been in. I have recommended Enviro Master to several people, I'm so impressed."

Judy & Graham Greengrass,
Styx Mill





The advantages of an inverter air conditioner

Finer temperature control

An inverter is a type of power conversion circuit that electronically regulates the voltage, current and frequency of a device. In an inverter air conditioner, this circuit controls the revolutions of the compressor – and hence the air conditioner’s output. In this way, inverter air conditioners provide much more accurate temperature control than non-inverter models.

Quick comfort

As soon as an inverter air conditioner is switched on, it provides the exact amount of power needed to rapidly cool or heat the room. This enables it to reach the set temperature in about half the time required by non-inverter models. You can be comfortable much sooner after you arrive home on a hot summer day or when you get up on a cold winter morning.

Energy-saving

Inverter air conditioners are extremely efficient and will save you a lot of electricity, and money, in the long term. Even though they are faster and more flexible than non-inverter models, they use less power, and are thus more environmentally friendly.

Flexible power control

You’re always comfortable with an inverter air conditioner. After quickly reaching the set temperature, it adjusts power output to maintain a constant temperature



Quality service

Enviro Master has installed three air conditioning units for the Guillemot sisters at The Active Room Gym. Leanne Guillemot-Mene says:

“When we outfitted our whole gym, the air conditioning system was a big part of initial costs. Enviro Master’s quote was so much better than anyone else’s for the three units we needed and there were no extra charges.

“Their service was just great, with no delays. The Enviro Master team were friendly and went out of their way to help, which was a refreshing change. They made the whole outfit a lot less stressful, were extremely professional and just nice people to work with.”

Leanne Guillemot-Mene,
The Active Room

The right system, correctly installed

Time after time we see heat pumps and air conditioning products installed in the wrong location, or a totally inappropriate system installed. This results in drafts, poor temperature control, excessive noise and very unhappy occupants. If a heat pump is installed incorrectly, its life expectancy can be drastically reduced. It can also be unsafe, causing a health risk to your family and work colleagues.

Enviro Master's 5-Star Installation Guarantee

- All equipment has a standard up to six years parts and labour warranty. Should it not work due to faulty workmanship, it will be fixed or replaced.
- The equipment will be installed in the location you requested on the agreed date. In the event stock is unavailable, you will be notified by phone.
- The equipment will be demonstrated to your satisfaction to ensure it is correctly used and you are assured of optimum efficiency and performance.
- The equipment will be evacuated, leak tested and commissioned ensuring it is running correctly before we leave your home.
- We will clean all areas we worked in to ensure your home is left as clean as it was before we leave your home.

Other products and services

Enviro Master also provides the following:

- Servicing of air conditioning systems.
- Supply, installation and servicing of:
 1. Swimming pool heat pumps. These systems will heat your pool to a pleasant temperature, with an energy efficiency factor of up to 5. (This means you will receive up to 5kW of heat for every 1kW of electricity used.)
 2. Air extraction for bathrooms.
 3. Ventilation systems, designed to reduce condensation in your home.
 4. Commercial refrigeration systems.



Getting results

Enviro Master has installed three heat pumps systems for Terrie Cresswell of Shenandoah Developments and is currently doing a fourth. One of them is in her own home. Terrie says:

"Before we installed the first heat pump, I shopped around but after that I didn't bother because Enviro Master really looks after us. Grant knows exactly what we want."

"What really stands out is the way Grant juggles his workload to fit in with me whenever I need to see him, even at short notice. He never makes it seem like a problem, and that kind of service is rare in today's world."

"When I ask for a quote, I get it within a couple of days. I just give Grant the plans and he comes back to me with two or three options and a recommendation, which he takes the time to explain. I never get the feeling he is steering me into a particular product that might be heavily discounted for him."

Terrie Cresswell, Partner,
Shenandoah Developments



Energy saving tips for your heat pump

- 1.** When choosing a heat pump, look at the COP (co-efficient of performance) of all the systems you are interested in. The higher the COP, the better.
- 2.** Talk to an expert at Enviro Master who can advise you on the most efficient way to run your system.
- 3.** Ask Enviro Master to visit your home to assess your requirements, to make sure you choose the most energy efficient system for your needs. Choosing the right-sized unit is one of the best ways to save energy, and money.
- 4.** Keep your filters clean. (At Enviro Master, we send our customers reminders every three months, free of charge.)
- 5.** Keep your outside unit clean and clear from any overgrown trees and shrubs.



- 6.** When using a heat pump in winter, it is most energy-efficient to leave it running **on heating** all the time. At night, or when you are away at work during the day, set the temperature lower, to conserve energy. Leaving the system running means it will not have to re-heat, and it will de-frost **less** often and more efficiently.





Grant Wadley, Managing Director of Enviro Master

Grant Wadley is a qualified refrigeration engineer and has been in the trade since the late 1980s. He did his apprenticeship in Blenheim, where he gained extensive experience servicing and installing commercial/domestic refrigeration and air conditioning systems. After moving to Christchurch in 1995, Grant joined a large engineering firm and eventually became Service Manager. During this time he completed his Advanced Trade Certificate in refrigeration engineering.

Grant founded Enviro Master in 2002, with his wife Michelle. They are both committed to providing the best possible heat pump and air conditioning solutions for customers throughout Christchurch and further afield.

How heat pumps benefit your home environment

We already know that lower energy consumption means that using a heat pump to heat your home is economical and beneficial to New Zealand's environment. But there are other benefits for your home too:

- ✓ The air from many of today's modern heat pumps can also reduce dust, pollen and other airborne impurities to give you a healthier environment all round.
- ✓ Unlike some other forms of heating, a heat pump does not consume oxygen, so rooms don't become stuffy.
- ✓ When used for cooling they lower humidity by removing excess moisture.
- ✓ Remember that there are no exposed hot surfaces, pilot flames, fuel burners or gas tanks to worry about.

- Air Conditioners
- Heat Pumps
- Extraction/Ventilation



41a Shakespeare Road,
P.O. Box 38022, Christchurch, New Zealand
Ph +64 3 366 0525, Fax +64 3 366 7075

www.enviromaster.co.nz