

THE Smarter Heat Pump Guide®

Everything you want to know about heat pumps

FREE GUIDE

Fujitsu introduces the
Performance Guarantee®

(So you know you'll always have the heat you need, whenever you want)

The smart way
to buy your heat pump
The new Comfort Selector®

BUYING TIPS

Which type of heat pump
will suit you best

Sponsored by:

FUJITSU

HEAT PUMPS

NEW ZEALAND'S FAVOURITE AIR™

The smart way to buy your heat pump

Only Fujitsu's Comfort Selector® will guarantee that you will be warm and cosy in winter, and cool and comfortable in summer.



Why it is the smart way

It is crucial that the heat pump you buy has the correct capacity for your needs. Too small, and it simply won't be effective or efficient; too large, and you will be wasting money. That's why we have designed the Comfort Selector®, especially for New Zealand.

How it works

Simply choose an installer showing the Comfort Selector® logo and ask him to assess your home for the right sized heat pump.

The Comfort Selector® program will identify the perfectly sized heat pump for your home ensuring years of efficient heating and Fujitsu comfort.

What you get

Page 1. About your home and area to be heated

This page shows all the information used to select the most effective heat pump for your needs. It includes size of area to be heated, insulation of walls and ceilings, window sizes, direction they face and

glazing. It takes into account your location in New Zealand and even includes the temperature at which you prefer to feel most comfortable.

Page 2. Heat pump selected

Here you will see the right sized heat pump in the style you want. It describes the heat pump, its capacity and how it performs at different temperatures, and includes operational guidelines – so you can get optimum use for years to come.

Page 3. Heat pump features

Shows in detail the benefits and features of the selected heat pump.

Page 4. Running cost

Now you will see the actual running cost – by the hour, day and month, based on

the power charges in your area. This page even shows you the savings you can make over traditional electric heating.

Page 5. Quotation

This page gives you a price for supplying and installing your selected heat pump.

Page 6. Performance Guarantee® certificate

This means that you have a written guarantee that the selected heat pump will perform exactly as promised. This is an additional guarantee to Fujitsu's 6-year parts and labour warranty on the mechanics of the heat pump. It means that now you can be certain that you will always be warm and cosy – no matter what the Kiwi winter throws at you!

ALL YOU NEED TO KNOW BEFORE YOU BUY...AND NOW YOU'RE PERFORMANCE GUARANTEED AFTER YOU BUY!

Welcome to Fujitsu's Smarter Heat Pump Guide®

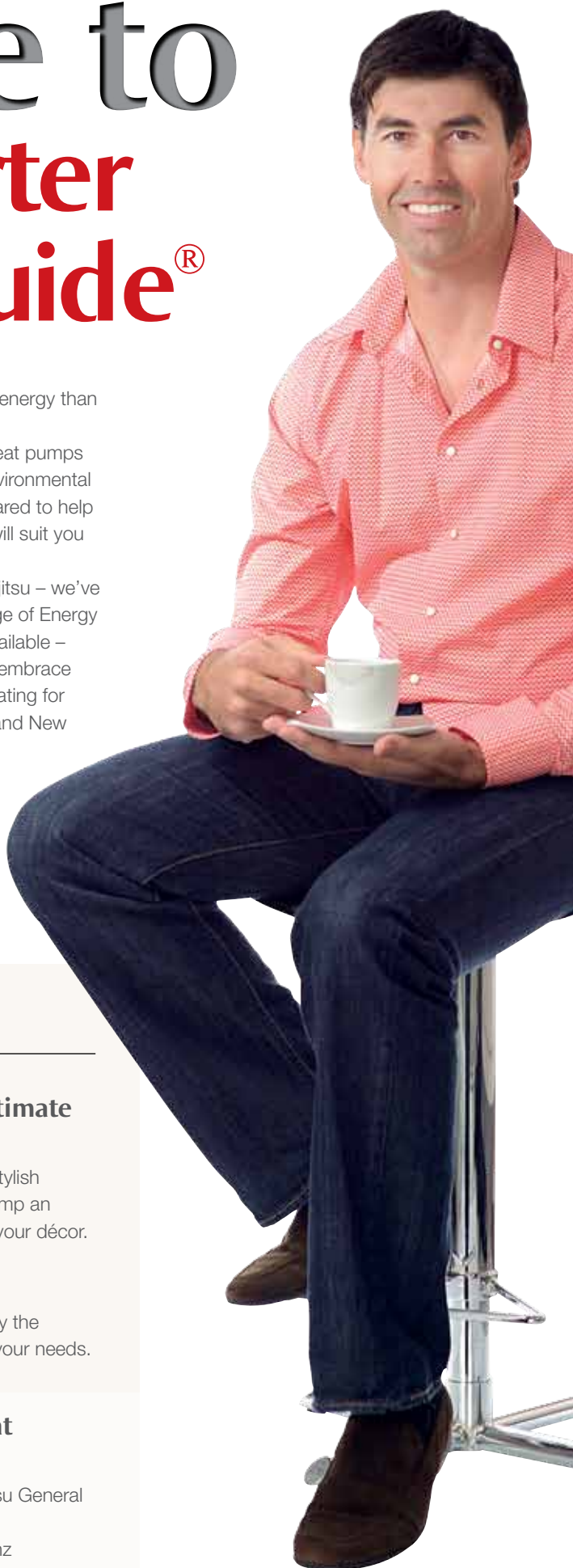
“Heat pumps are one of the most efficient heating methods available in New Zealand, and can heat a Kiwi home for a fraction of the cost of running electric or gas heaters.

They are also air conditioners, a great bonus in summer heat and humidity! And as well as delivering savings to your pocket, heat pumps benefit the environment. Those benefits start at home where filters in some heat pumps clean or deodorize the air for a fresher, healthier environment. Our Government and many Local Councils are actively encouraging the purchase of heat pumps over other forms of heating to counter environmental problems (especially from the “exhaust” of fuel heating), and to help fight against climate

change by simply using less energy than other heaters.

This guide explains how heat pumps deliver these savings and environmental benefits, and has been prepared to help you choose the model that will suit you best.

We hope you choose a Fujitsu – we’ve certainly got the biggest range of Energy Star qualified heat pumps available – but most of all we hope you embrace this clean, green, efficient heating for the benefits it offers to you, and New Zealand! ”



Contents

4 The ultimate home improvement

Enjoy effortless comfort as you save on heating.

6 How to choose a heat pump

Heat pumps are a versatile technology with features to suit almost any home.

Finding the perfect heat pump can be easy. Here are tips to help you find the right one for you.

8 Ducting – the ultimate heating option

Discover ducting, the stylish way to make a heat pump an all-but-invisible part of your décor.

10 Buying tips

Key tips to help you buy the perfect heat pump for your needs.

The Smarter Heat Pump Guide

Brought to you by Fujitsu General New Zealand Limited
www.fujitsugeneral.co.nz

Fujitsu Comfort: the ultimate home improvement

Effortless comfort

Let's face it: home is where you want to relax and put your comfort first. So what better home improvement than perfect year-round temperature – whether it's a bitterly cold Kiwi winter's night, or a hot, humid summer's day?

Heat pumps are a miracle of modern engineering. They trap warmth from outside, and bring it into your home at incredibly low cost. No heating element required! In the summer, you just reverse the process with the push of a button, and your heat pump will cool and dehumidify your home.

Why it feels more comfortable

Heat pumps deliver warm air to your home – and you choose the temperature you are most comfortable with. You will enjoy constant warmth that gently circulates throughout the room or, depending upon the model, your whole

house. There's no need to rearrange your furniture (and yourself) around the fire; you will have the freedom to dress how you want, and relax where you want in effortless comfort. Now, that must be the ultimate in home improvement!

Today's new generation heat pumps are more energy efficient, quieter and provide more lifestyle features than ever before.

Extra lifestyle features

Fujitsu technology adds more than comfort to your home lifestyle.

Some models can add fresher, healthier air quality with features and filters that absorb fine dust, pollen and invisible mould spores – other models use filters that absorb unpleasant household odours too, like kitchen and

pet smells, whilst the Nocrria models have self-cleaning filters capable of removing harmful bacteria.



Not all heat pumps are created equal

Whichever Fujitsu model you choose, you can be assured that you are choosing the best product available in efficiency and quietness. Gain more knowledge of the Fujitsu models from the brochures found at www.fujitsugeneral.co.nz. For example you can see efficiency ratings, sound



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 it. 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 freezing cold winters night) and transfer it into your home.

That's a major advantage over electric or gas heaters. Some heat pumps have a boost electric element so they can work in freezing cold weather. Fujitsu models do not, which means better energy savings. Then, at the touch of a button, your heat pump can run in reverse, acting as an air-conditioner to pump heat out of your home – reducing humidity and keeping it fresh and cool in summer.

level information and much more. The Fujitsu brand carries the most Energy Star heat pump models. That means you will save on your heating bill as well as helping the environment.

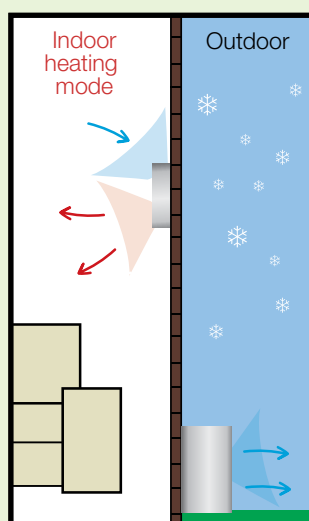
What's an Inverter?

Inverter systems are more economical to operate than conventional units.

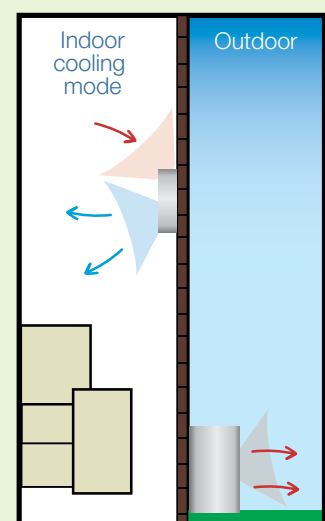
They can handle greater extremes in temperature, are smoother and more stable in operation and reach the desired temperature more quickly than conventional models. ■

ENERGY SAVING TIP

Insulate your home. Keep warmer in winter (and cooler in summer) by installing wall and ceiling insulation. A well-insulated home can be up to seven degrees warmer in winter.



In Winter
Even on freezing winter days and nights your heat pump traps heat from outside, compresses it and transfers it into your home. Fujitsu heat pumps still provide heat even when it is -15°C outside.



In Summer
Switch onto cool, and the heat pump becomes an air-conditioner – pumping heat and humidity out of your home, leaving it cool and very comfortable.



How to choose a heat pump

The correctly sized and professionally installed heat pump will perform efficiently for years to come.

It is important to get it right the first time

It isn't difficult to choose the style you like (see opposite page), but it is very important that you choose the correctly sized heat pump for your needs.

That's why Fujitsu have developed the Comfort Selector®.

Using the Comfort Selector® is the most efficient way to make sure you

have the perfectly sized heat pump for your home. That's the reason why only Fujitsu can guarantee the performance of the selected heat pump in your home. In writing.

Choosing the right installer is very important. Unfortunately, poor installation is not uncommon, and it can affect

performance and efficiency of your heat pump. So we strongly advise that you choose an accredited heat pump installer – that way you can be sure they have the skill, expertise and professionalism needed to give you years of efficient, worry-free heating.

The first decision to make is which type and style of heat pump will suit you and your needs best. While an important part of your decision is how it will look in your home, you also need to look at the differences between the models. Here's a brief guide to the types available, and their key benefits.

Hi Walls



These are by far the most popular models. They sit high on the wall, and offer excellent efficiency with all the benefits of heat pump heating, like clean, immediate and convenient operation.

What to look for: Check the efficiency levels, and that the model has an Energy Star. Make sure that it has inverter technology, and look for bonus features like economy mode, filters for fresher air and quiet modes (there is no quieter model than Fujitsu when heating efficiently). Of course the model you choose should look good too – and the new generation Fujitsu compact models have an elegant flat panel to complement any interior.

It should be remembered that every heat pump has an outdoor unit too – and here you should make sure that it will withstand our tough New Zealand conditions, so don't hesitate to ask if the outdoor unit is weather-proofed. Fujitsu outdoor unit fins are coated with cobalt blue – a blue corrosion-resistant material that enhances durability and extends the performance life of the heat pump.

Nocria



This model is unique to Fujitsu, and is a breakthrough in heat pump technology, in that it even cleans itself! It sits just under the ceiling, offers superb efficiency and a brilliant UV filtration system that is

recommended by Asthma New Zealand. The filters not only filter out common allergens that can trigger allergies and asthma, but even drive away bacteria in the air.

These models are the ideal choice for high efficiency, high performance, maximum air quality. Plus you'll never have to clean the filters!

Floor Models



These models are very compact and can replace old night storage heaters – in fact they look like more elegant versions of traditional wall heaters.

What to look for: Again, check that they are Energy Star qualified, and have the extra features you want, such as wall controllers, economy mode, filters and an outdoor unit which is cobalt blue protected.

Ceiling Cassettes



Choose these if you want your heat pump to be discreet – as only the grill shows in the ceiling.

Multi Systems



Here, just one outdoor unit can heat up to four indoor areas, making it easy to heat and air-condition most domestic applications.

Ducted Systems



These are the ultimate home improvement. They heat and cool your whole home. Ducting is invisible, and it can cost less than you might think.

The Sleep Pump®

This ducted system is an inexpensive way to condition up to



3 bedrooms. They are the perfect way for the whole family to get a good night's sleep – summer or winter.

Choosing the right sized heat pump

This is the most important decision of all: too big, and you will be paying too much; too small and it will never heat effectively or efficiently and still cost a lot to run.

Every home is different, and there are many factors that affect the choice of size (or capacity) of the heat pump you need for your own circumstances.

That's why the Comfort Selector ® is such an important part of the purchase decision. This program not only identifies the best heat pump for your individual needs, but also gives you a report with all the information you need to make an informed decision, such as heat pump features, running cost, savings you can make and how to use the heat pump effectively and efficiently.

Ask for your Performance Guarantee

Why take any risk when you can receive a guarantee that the heat pump will work effectively, exactly as described? This is separate from a parts and labour warranty against a defective appliance. This is a written guarantee that the model you are recommended will perform effectively and efficiently in your home – exactly as described in the written guarantee. ■

Ducting

the ultimate heating solution

Ducting means that when you get up on a freezing morning or when you come home on a hot, humid afternoon your house is just the right temperature!

Heating your home should enhance comfort, and offer you features that enhance your lifestyle too.

The ultimate in heat pumps

Ducted heat pumps are surely the ultimate in comfort. The Fujitsu ducted models offer quiet, efficient operation, are easy to maintain, and operate via a smart wall-mounted LCD controller that is easy to use and covers all functions of the system.

Invisible comfort

Whatever the shape of the room, ducted units can create uniform temperatures throughout. The indoor unit is totally concealed, usually within a ceiling void and cool or warm air is then ducted into each room through outlets positioned in the ceiling. Easily controlled, Fujitsu's ducted systems provide comfort throughout your house without leaving cool or hot spots.

Features in ducted systems

Single-phase ducted models are able to heat (or cool) several rooms, with features to make life a lot more comfortable and economical. With today's modern systems you can expect

features such as weekly timers, auto changeover and temperature setback.

The Fujitsu Inverter Ducted System, uses the highly efficient R410A refrigerant which has zero ozone depletion properties, as it contains no chlorine, as well as offering superior energy savings.

Ducted installers

Installation of a ducted system in your home needs an experienced specialist to ensure years of trouble-free, effective and discreet comfort.

The companies who offer this specialist skill can be identified by the Ducted logo on the Fujitsu website. These installers have attended training in airflow and ductwork, and have access to Fujitsu's Ductcalc program, which assists in the selection and application of a ducted system to provide the best possible comfort and efficiency for your unique home. ■



The benefits of ducted heat pumps

- Perfect comfort throughout the home
- Invisible and effortless
- Easy installation
- Heats the home in winter, cools and dehumidifies in summer
- Quiet operation
- Smart, easy-to-use wall controller, with many features
- Saves power



ENERGY SAVING TIP

Don't overheat. Every one degree increase in temperature is a 10% increase in heating bills and emissions!

ENERGY STAR heat pumps – the smart choice



THE GLOBAL MARK OF
ENERGY EFFICIENCY

Congratulations to Fujitsu for the wide range of ENERGY STAR qualified heat pumps they have made available to New Zealanders, and for putting together this guide to help you make a well-informed choice.

Heat pumps are one of the most energy-efficient forms of heating available. A good one can give you around 4 1/2 times the amount of heat for the same price as running a conventional heater.

But you only get the energy efficiency gains if you use your heat pump smartly – otherwise your power bill may not show much of a saving at all.

Ask your Accredited Fujitsu Installer to give you good advice tailored to your home. But in the meantime, here are some general tips to help you get the most out of your heat pump:

- Make sure your home is as well insulated as possible before you put your heat pump in – you could lose up to 75% of the heat you are paying for, through your ceiling, walls and floor.
- Choose a heat pump that carries the blue ENERGY STAR mark – it tells you which are the most energy efficient available.
- Only heat the spaces that you are actually using, and shut doors and curtains to keep the heat in.

- Don't have the temperature higher than you need it. Aim for between 18°-22° Celsius while you are using a space and then 16° Celsius if you need it on overnight - otherwise, we recommend turning it off until the morning.
- Learn to use the timer features so your heat pump comes on an hour or so before you get home or get up in the morning, instead of leaving it on all day.
- Keep your heat pump well maintained, including making sure the filters are cleaned annually.

Enjoy the heat pump you choose – by using it smartly, you'll reap the rewards over the coming years.



Mike Underhill
EECA Chief Executive

Heat pump buying tips

A heat pump is an important long-term purchase, so here are some tips to help you choose the right one.

1. Choose the style of heat pump that you like best (see pages 6 and 7)
2. Get more than a quote – ask for the Comfort Selector® and you will also get a full report about your needs, heat pump features, running cost, savings you will make, and importantly, the peace of mind of knowing you will have the perfectly sized heat pump to give you years of efficient heating.
3. Ask for a written Performance Guarantee® before you buy – so that you will be sure that the recommended heat pump will perform (that is, heat and cool your chosen area) exactly as written.
4. Use only an Accredited heat pump installer. A premium product deserves a professional installation. Unfortunately, there are installers out there who will give you a second
- rate job, so ask to see their Red Card. Plus, you will get a full 6-year parts and labour warranty with an Accredited Installer.
5. Choose an Energy Star qualified model.
6. Check that the outdoor unit has a cobalt blue heat exchanger, so that it is corrosion resistant for durability and extended performance life.

Explanation of Terms

Most heat pump manufacturers publish a list of “specifications” for their models.

Here is an explanation to help you understand some of the more important terms.

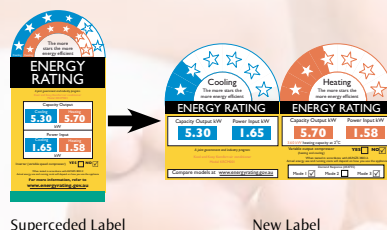
COP: this stands for “Coefficient Of Performance”, and is an important measure of the efficiency of the model.

Simply, it is the relationship between energy used and heat delivered at normal operation. For example, with a heating COP of 4.6 – you will get 4.6kW of heat for every 1kW of energy used. The higher the COP, the more you save!

Energy Star rating label: Energy Star rating labels help you choose the most efficient heat pumps. Simply put the more stars on the label, the more energy efficient the heat pump is compared to similar sized heat pumps.

A recent upgrade by MEPS (Minimum Energy performance Standards) means

that new labels have been introduced with less stars allocated to the same energy efficiency levels, so make sure that you are comparing the new labels as the old labels are still in circulation.



Fujitsu are leaders in energy efficiency, with their new generation heat pumps achieving higher star ratings than the leading competitors.

Energy Star qualified: the Energy Star® is the global mark of energy efficiency.

It now also includes a requirement that's designed to ensure a

correctly sized Energy Star® heat pump will perform efficiently at 2°C (some heat pumps struggle to perform between 0°C and 5°C). The Fujitsu brand carries the most Energy Star heat pump models.

Heating range: Your heat pump must be able to supply heat indoors, even when it's freezing outside. Fujitsu models heat even when the outside temperature is at -15°C.

Indoor sound: This is the sound (in decibels) that your heat pump makes from its fan inside. Heat pump noise is no longer the problem it once was, the technology has been improved so that you will barely be able to hear them, especially with those models that have ‘quiet’ mode. As you’d expect, there are no quieter heat pumps than Fujitsu when heating efficiently.



Energy saving tips

How heat pumps benefit your home environment

We already know that lower energy consumption means that heat pumps are economical and beneficial to New Zealand's environment. But there are other benefits inside 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.

Heat pumps are safe, economical and environmentally friendly: maintenance only entails cleaning the filter, no messy fire places to clean out and ash to dispose of.

Around the home

Lighting

Choose energy-efficient, compact fluorescent globes. They last 6-10 times longer and use 80% less energy than standard globes. Don't leave outdoor security lights on all night or during the day – consider installing a timer or sensor.

Kitchen

Old inefficient refrigerators can use 3 times the energy of the newer efficient ones. Choose an efficient refrigerator which is Energy Star rated. Make sure your fridge is located in a cool spot (e.g. away from the oven) and the seals are tight. Microwaves and

electric frying pans are much more efficient than the oven. Thaw frozen foods fully before cooking to save time and energy.

Laundry

Use cold water in your laundry whenever possible. Front-loading automatic washing machines use less energy and water than top loaders. Never overload your automatic washing machine, as this reduces the cleaning action. If it's a sunny day, don't use the clothes dryer, but hang your washing on the clothesline. It will smell fresher too! ■

For your heat pump

Importantly, check the Energy Star rating and the COP of the unit you intend to buy, if unsure, ask your Accredited Installer.

Most heat pumps are very efficient heaters, but some are even more efficient than others

1. Energy efficiency

Once you have checked that you have an energy-efficient heat pump, choose an Accredited Installer who will also advise you on the most efficient way to run the heat pump. Correct running and maintenance will mean that your heat pump will always be at its most efficient.

2. In home consultations

Choosing the correctly sized heat pump for your needs is one of the best ways to save energy and money, as well as ensuring the heating (and cooling) performance you want for years to come. This is the time to get the best available advice from an expert who will take the time to assess your home and heating needs. That's why we again firmly recommend that you use an Accredited Installer, who will have the expertise and professionalism to recommend the perfectly sized heat pump for your unique needs.

3. Best operating efficiency

Once an Accredited Installer has installed your unit, the most efficient settings are 20-22°C in winter and 22°C if you want to take advantage of your heat pump in summer. Also, make sure that your doors and windows are closed.

4. Insulation saves heaps

Ceiling and floor insulation will make incredible savings – often paying for themselves quicker than you think, as well as adding to the value of your home.

5. Clean heat pump filters

Regular cleaning will ensure your heat pump will heat at 100% efficiency all the time.

6. Use the timers on your controller

There is no need to run your heat pump all day, or when you are not there. You can set it so it comes on before you wake, to reduce as outside temperature warms, turn off when you go out, and then to switch itself on before you come home.

PROFESSIONAL INSTALLATION IS AS IMPORTANT AS THE BRAND

An accredited heat pump installer will ensure that you select the perfectly sized heat pump for your unique situation, to giving you years of efficient performance.

They can save you heaps on your power bill.

That's why we have an accreditation scheme for heat pump installers. In fact, we at Fujitsu are so confident in the quality of our heat pumps, the workmanship and reliability of Fujitsu Accredited Installers, that we give you 6 years full parts and labour warranty when you choose an Installer who has been Accredited by Fujitsu.

That's New Zealand's longest warranty.

ASK TO SEE THE RED CARD – and you'll get peace of mind of knowing you will have New Zealand's favourite air installed by New Zealand's finest installers, PLUS a full 6-year warranty.



www.fujitsugeneral.co.nz

FUJITSU

HEAT PUMPS

NEW ZEALAND'S FAVOURITE AIR™