

Hiwall Split System Heat Pumps - Frequently Asked Questions...

q: - How do the different “Modes” operate ?

Cooling

For summer conditions set the system to “cool” and set the desired temperature, normally say 22 degree’s. The system will cool the room down to the set temperature and then switch the compressor off. However, the indoor unit fan will continue to operate, distributing room temperature air around the room. Once the room temperature rises again, the compressor will switch back on providing cool air to lower the temperature back to the set point. ***Do not set below 20 degrees on cooling as this can cause the system to fault.***

Heating

For winter conditions set the system to “heat” and set the desired temperature, normally say 23 degree’s. The system will heat the room up to the set temperature and then switch the compressor off. The indoor unit fan will continue to operate only until the residual heat has dissipated from the coil, then it will ramp the speed down to almost stopped during the off cycle. Once the room temperature drops, the compressor will switch back on providing warm air to raise the temperature back to the set point. The indoor fan will slowly ramp up to full speed once the indoor coil is warm enough. This feature reduces unnecessary cold draughts during the compressor “off” cycle.

Auto

This is a high efficiency mode, which will automatically select heat or cool depending on the room temperature. However, there are a few compromises regarding set point temperature, and other internal settings which are not as flexible as heat or cool mode. We generally recommend that you do not use “auto” mode in a domestic situation, as the system will alternate from heat to cool mode, eliminating the opportunity for “free cooling / heating”.

Dry

Remember that these systems are a worldwide product. The “dry” mode is generally used in high temperature / high humidity climates, where moisture removal is required during summer months. For the system to operate in the dry mode, the temperature is generally required to be above 17 degrees, so it will often not suit Waikato conditions, where we require moisture removal from the air during winter months. However, you will still benefit from moisture removal on hot summer evenings.

q: - Does the system automatically defrost in winter ?

Yes, the system will automatically defrost in extreme cold weather, especially low temperatures in high humidity (fog). You can tell the system is in defrost as it will not blow any air, and often have a small flashing light on the front. This process will normally last around 15 minutes and the system will restart automatically. To avoid this being an inconvenience we suggest in extreme cold conditions you use the “on timer” to have the system start approx 60 to 90 minutes before the room is to be used.

q: - What fan settings should I use ?

Generally the larger the room, the more airflow is required. *This is a real balance of performance versus personal preference.* It is important you don't sit in a draft and that the system is not noisy, so set the fan speed that best suits you, and the layout of your room. This also applies to louver settings on the unit.

q: - What temperature settings should I operate the system at ?

Summer - generally anything above 21 degree's
Winter - comfort temperature is normally around 23 degree's, but you may wish to operate the system at a lower temperature for bedrooms or overnight (see below) or when the area is not occupied.

q: - Should I run the system 24hrs on heating ?

Many people will operate the system 24hrs a day on heating, and will generally lower the setpoint to around 17 degree's overnight. This keeps the living environment warm and dry, and allows the system to heat up far more quickly once the area is reoccupied. A constant temperature 24hrs will also often help with condensation problems.

q: - When should I use the timer function ?

Generally people use the timer function to start the system early in winter, preheating the room before getting up in the morning, or coming home in the evening. We would suggest that the timer is set approx 60 to 90 minutes prior to using the room. This also applies on cooling in summer conditions.

q: - Does it cost a lot to operate on heating ?

An inverter heat pump has an efficiency around 400% or around 4 to 1. Therefore it will cost about one fourth of a standard electric heater to operate. As exactly the same process is used to create cooling as it is to create heating, the system costs about the same to run per hour in either mode.

q: - How long should the remote control batteries last ?

Alkaline batteries will generally last 1 to 2 years, however, the initial batteries that come with the system can sometimes only last a few months as sometimes they are not “fresh”.

Maintenance / Filter Cleaning

q: - How often should I clean the filters on the indoor unit ?

Generally clean the indoor unit filter every 60 to 90 days. This will largely depend on the amount of dust etc in the air, so start by checking monthly until you know how often cleaning will be required.

q: - What maintenance do I need to do on the outdoor unit ?

Just keep it clear of floating rubbish / leaves / plastic bags, as well as any bushy plants etc so that the airflow is not blocked to the unit. It is recommended that you wash the unit down with warm soapy water along with a gentle water hosing of the back coil to rinse away dirt that may collect here. The outdoor unit is completely weather proof, and resistant to rodents etc.

Note:

New equipment is generally covered by a full five-year parts and labour warranty. However, as specified in our quotation, this warranty excludes the breakdown of equipment caused by a lack of regular maintenance (filter cleaning). For all brands of Heat Pumps it also excludes any faults caused by rodent and vermin ingress damage (e.g. cockroaches or mice) and any corrosion damage in a salt or Sulphur laden environment.

For a domestic heat pump system that is used regularly we recommend that the filters are cleaned at least every 60 to 90 days. In a normal domestic environment this will keep the system operating efficiently. *You can carry out this check yourself **and you will find instructions regarding the cleaning in the "Owner's Manual"**.* We also offer a filter cleaning service if required.

This check would include the following:

- Check operation procedure.
- Clean filters (replacement filters if required at extra cost).
- Check condenser and evaporator coils.
- Check condensate drainage, making sure there are no blockages.
- Report on any further work that may be required on the equipment.

Also Includes Disinfectant for Indoor Units

We use "Greenleaf Coil & Duct Disinfectant" on the indoor unit filters, which is an all in one spray designed to disinfect air conditioning duct surfaces and indoor coils, whilst deodorizing with a mild "eucalyptus" fragrance. It is designed to kill bacteria as well as mould, fungi and mildew and helps cure bad odours. A Product Technical Data Sheet is available on request.

q: - Why should I purchase my system from Eastside Refrigeration ?

We have been selling, installing, servicing and maintaining heat pump systems for over 40 years. We have a huge wealth of experience in the design and application of this product, and will guarantee the performance of our equipment in writing.

➤ **Service Department**

We have a full commercial and domestic service team of approx 9 guys trained and experienced in Heat Pump and Air Conditioning service work. This means you can be assured of getting an experienced tradesman quickly if the need arises.

➤ **Maintenance**

We have a separate team of technicians trained and experienced to undertake the “preventative maintenance” of air-conditioning, normally preventative checks carried out every 3 months. We find by running this team separate to the service department the work continues to get done, rather than pushed to one side when service is busy.

➤ **Installation**

We also have a team of dedicated to air conditioning installation work. These guys have various qualifications including two with HVAC tickets, and all are experienced. We find with our own “in-house” installers rather than contractors we can control the quality of installation and make sure our guys are on time.

➤ **Electrical**

While we employ a registered electrician on staff, all electrical work is sub-contracted to a Registered Master Electrician who does this style of work for us exclusively. They are available same or next day for us, and we have used them for approx 20 years. **We feel this is a critical aspect of controlling quality of workmanship and a Certificate of Compliance is issued at the end of each job.**

➤ **After Hours Callout**

We have a 24hr, 7 days emergency callout service available to existing clients (conditions apply).

Check out our website on www.eastsiderefrigeration.co.nz