



HYPERCORE

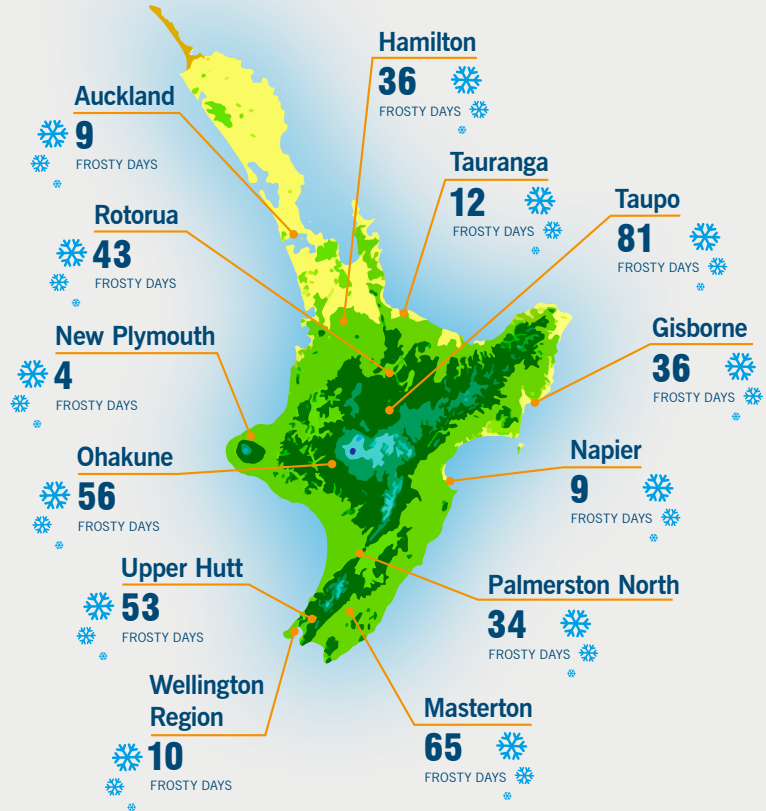
HEAT PUMP TECHNOLOGY

Guaranteed full heating capacity
... even on the coldest days!



Quietly Superior
Heat Pumps

THIS IS **HYPERCORE**[®] COUNTRY



Mean number of days per year of ground frost according to the NIWA website. Ground frost occurs when the air at ground level is chilled below freezing point. Map used with permission from NIWA.

Guaranteed Full Rated Heating Capacity – Right Down to -15°C

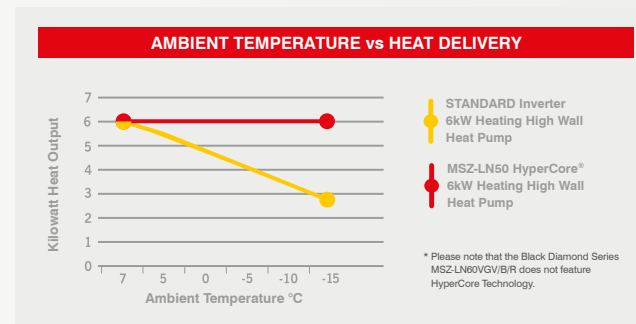
Mitsubishi Electric offers a range of heat pump solutions with HyperCore Technology that are specifically designed to ensure their full rated capacity is produced, even on cold frosty days.

Did you know ordinary heat pumps start to produce less heat below 7°C ? The reduction in heat output is especially noticeable when the temperature drops below zero. At these low temperature conditions ordinary heat pumps can really struggle to cope.

Feel the Warmth Even on the Coldest Days

We guarantee fully rated heating capacity on selected Black Diamond LN Series* and RapidHeat KW Floor Console** models right down to -15°C ! It's our promise that no matter where you live, you can have peace of mind in knowing you'll get all the heat you paid for and feel the warmth, even on the coldest days.

* Black Diamond LN High Wall Heat Pump 2.5kW – 5.0kW models come standard with HyperCore Technology.
** RapidHeat KW Floor Console Range includes a 5.0kW and a 6.1kW model with optional HyperCore Technology.



This graph shows two heat pumps rated to provide 6kW of heat, with different performance as the temperature drops – the standard heat pump produces less heat while the HyperCore LN50 model delivers the full 6kW, heating the room up fast when you need it most.

ORDINARY HEAT PUMP



HYPERCORE



How Advanced HyperCore Technology Works

When temperatures drop below zero degrees, ice builds up on the outdoor unit of any heat pump. How the heat pump reacts to this determines how effective it will be in providing heat to your home. Advanced HyperCore technology delivers maximum effectiveness.

HyperCore Compressor

HyperCore Heat Pumps are fitted with a 'heating caulking compressor' unique to Mitsubishi Electric. This compressor moves more vapour volume for less energy input, allowing it to maintain efficiency and higher revolutions.

Advanced Defrost Logic

To remove the ice build up, the heat pump will go into "Defrost Mode" and during this time the heat pump will not be delivering heat into your home. HyperCore's Defrost Logic has been fine-tuned to extend the period in between defrost periods and optimise its heating performance.

Heating Performance to -25°C

Mitsubishi Electric HyperCore Heat Pumps have an extended heating operation range to allow heating to -25°C.

To achieve this, the system logic within HyperCore Heat Pumps has been refined to decrease the number of defrost cycles required under colder ambient conditions.



These units also incorporate a 130 watt drain tray de-icer that prevents ice forming on the base, which due to ice expansion would inadvertently affect the unit's performance. Importantly this de-icer does not supplement the heating cycle in any way, and will not operate under most ambient conditions above zero degrees.



Black Diamond LN Series

The Black Diamond LN Series sets the new standard in personalised comfort and style. Available in three reflective colours, the range is packed with advanced features including Plasma Quad Plus Filtration ideal for allergy sufferers, the 3D i-See Sensor for customised heating or cooling and Wi-Fi Control is built-in!



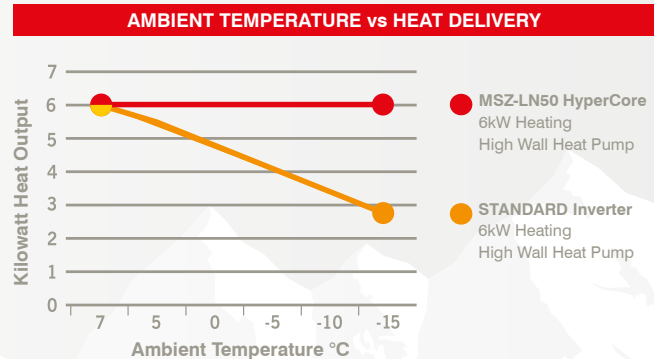
Dimensions (WxDxH): 890 x 233 x 307mm

* Please note that the Black Diamond Series LN60 does not feature HyperCore Technology.

Low Temperature Performance, Guaranteed

The Black Diamond Series 2.5–5kW capacities come standard with HyperCore Technology. As the graph below shows, even though both heat pumps are rated to provide 6kW of heat, their performance differs greatly as the temperature drops.

While the standard heat pump produces less heat, the LN50 6kW HyperCore High Wall model continues to deliver the full 6kW heating you paid for.



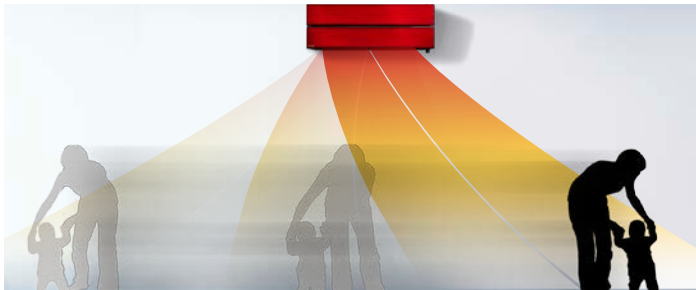
Key Features

3D i-See Sensor

The 3D i-See Sensor detects the presence and position of people in the room using thermal heat recognition, adjusting the temperature and airflow pattern for optimal comfort. This helps the Black Diamond LN Series do more than simply save energy, it also enables a new level of truly personalised comfort to be achieved.

Intuitively Adjusts the Airflow Direction to Where it's Needed

The 3D i-See Sensor works in conjunction with the Dual Split Vanes to provide heating or cooling to where it is needed most. As a result, it can save energy by not heating or cooling areas that don't require it. Whether you prefer direct, indirect or evenly distributed airflow, the 3D i-See Sensor and Dual Split Vanes provide the ultimate in customisable airflow.

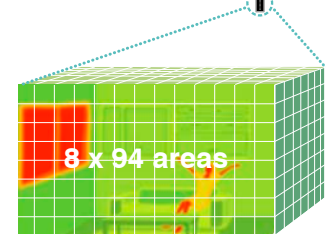


You always feel warm and comfortable as the direct heat follows you as you move around the room.

i-see Sensor



8 Sensors measure while moving left to right



752 Three-dimensional zones

Advanced Plasma Quad Plus Filtration

The new advanced Plasma Quad Plus Filtration System, featuring high performance two stage plasma technology, filters the air to clean away smells, dust, moulds and other common household allergens.



Dual Barrier Coating Maximises Efficient Performance

Built-up contaminants can create unpleasant odours and force a heat pump to work harder. Dual Barrier Coating keeps key internal components cleaner – for year-round peace of mind.



More Environmentally Friendly R32 Refrigerant

With a global warming potential that is 30% lower compared to older refrigerants such as R410A, next-generation R32 refrigerant has a much lower environmental impact. Furthermore, zero ozone depleting R32 is easier to reuse and recycle.



Quiet Operation

Black Diamond LN indoor units feature Silent Mode – a fan speed setting that provides quiet operation as low as 19dBA* so you will feel the warmth, not hear it.



Wi-Fi Control Built-in! Never Return to a Cold Home Again

With built-in Wi-Fi Control you can pre-heat or cool a room no matter where you are, so you'll always arrive home to total comfort.



* MSZ-LN25/35 indoor sound level on lowest fan speed.



RapidHeat KW HyperCore Series

The RapidHeat KW Floor Consoles feature a contemporary slimline design and dramatically reduced depth. RapidHeat KW Floor Consoles are the perfect solution for unobtrusive heating at floor level.

New advanced sensors with Intuitive Control Logic Technology offer unparalleled low temperature heating performance in the shortest amount of time, all while maintaining maximum energy efficiency.

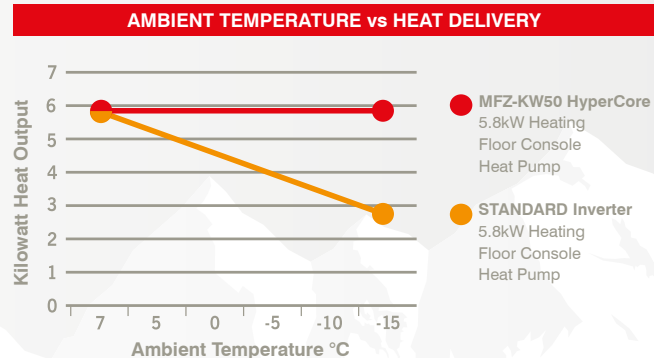


Low Temperature Performance, Guaranteed

The RapidHeat KW50 and KW60 Floor Consoles are available with HyperCore Technology.

As the graph below shows, even though both heat pumps are rated to provide 5.8kW of heat, their performance differs greatly as the temperature drops.

While the standard heat pump produces less heat, the KW50 5.8kW HyperCore Floor Console model continues to deliver the full 5.8kW heating you paid for.



Key Features

RapidHeat Technology

Advanced sensors coupled with Intuitive Control Logic mean optimal running temperatures are reached in the shortest amount of time possible with maximum energy efficiency.

Automatically activated at start-up in low temperature conditions when Two-Way Airflow is selected, warm air is blown in a downward direction first before the air is returned back into the indoor unit where it is reheated a second time.

As a result, a room can now be heated up to twice as fast compared to our previous model.*

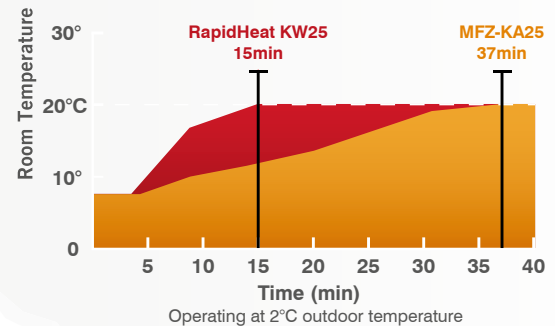
Multi Vane Flow for Even Heat Distribution

The Multi Vane Flow function blows warm air in both an upward and downward direction providing fast, even and effective heating whilst also reducing draughts.

* Compared to the previous MFZ-KA Series,



**RapidHeat Series vs Previous Floor Console:
Time to Reach 20°C**



Sleek, Sophisticated Design

Mitsubishi Electric RapidHeat Floor Consoles feature a new contemporary design that can be recessed into your wall to dramatically reduce the depth of the indoor unit from 215mm to 145mm – a decrease of 33%.

More Environmentally Friendly R32 Refrigerant

With a global warming potential that is 30% lower compared to older refrigerants such as R410A, next-generation R32 refrigerant has a much lower environmental impact. Furthermore, zero ozone depleting R32 is easier to reuse and recycle.

Anti-Allergy Enzyme Filter

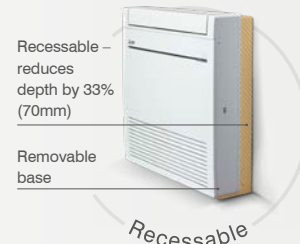
In addition to a washable Air Purifying Filter, the KW Series features an Anti-Allergy Enzyme Filter which utilises enzyme catalysts to filter allergens and remove harmful bacteria.

Optional Wi-Fi Control

With optional Wi-Fi Control you can pre-heat or cool a room no matter where you are, so you'll always arrive home to total comfort.

Easy Filter Maintenance

Because the RapidHeat KW is mounted at floor level, the filters can be easily accessed for cleaning.





Specifications

MODEL		MSZ-LN25	MSZ-LN35	MSZ-LN50	MFZ-KW50HZ	MFZ-KW60HZ					
Indoor Unit		MSZ-LN25VGVB/R	MSZ-LN35VGVB/R	MSZ-LN50VGVB/R	MFZ-KW50VG	MFZ-KW60VG					
Outdoor Unit		MUZ-LN25VGHZ	MUZ-LN35VGHZ	MUZ-LN50VGHZ	MUFZ-KW50VGHZ	MUFZ-KW60VGHZ					
Compressor Type		HYPERCORE™	HYPERCORE™	HYPERCORE™	HYPERCORE™	HYPERCORE™					
Refrigerant		R32	R32	R32	R32	R32					
Cooling	Rated Capacity	2.5kW	3.5kW	5.0kW	5.0kW	6.1kW					
	Energy Efficiency Ratio (EER)	5.10	4.27	3.62	3.78	3.52					
	Indoor Sound Level [*]	19 dBA	19 dBA	27 dBA	27 dBA	27 dBA					
Heating	Rated Capacity	3.2kW	4.0kW	6.0kW	5.8kW	6.5kW					
	Coefficient of Performance (COP)	5.33	4.88	4.00	3.79	3.45					
	Indoor Sound Level [*]	19 dBA	19 dBA	25 dBA	29 dBA	29 dBA					
ZERL Star Ratings	NZ Cold Areas	5.0	3.0	4.0	3.0	3.5	2.5	2.5	2.0	2.5	2.0
	Average Areas ^{**}	4.5	3.5	4.0	3.5	3.0	2.5	2.5	2.5	2.5	2.5
	Hot Areas ^{**}	5.0	4.0	4.0	3.5	3.5	3.0	3.0	3.0	2.5	3.0
Indoor Unit Dimensions	WxDxH (mm)	890 x 233 x 307	890 x 233 x 307	890 x 233 x 307	750 x 215 x 600	750 x 215 x 600					
Outdoor Unit Dimensions	WxDxH (mm)	800 x 285 x 550	800 x 285 x 550	840 x 330 x 880	840 x 330 x 880	840 x 330 x 880					
Outdoor Operating Temperature Range	Cooling	-10°C to 46°C	-10°C to 46°C	-10°C to 46°C	-10°C to 46°C	-10°C to 46°C					
	Heating	-25°C to 24°C	-25°C to 24°C	-25°C to 24°C	-25°C to 24°C	-25°C to 24°C					

* Sound level rated at lowest fan speed.

** Average/Hot areas are Australia only.



Black Diamond Technologies and Mitsubishi Electric – an Exclusive Partnership Since 1981

The Mitsubishi Electric Product Range has been exclusively distributed by 100% locally Owned and Operated Black Diamond Technologies Limited for over 40 years in New Zealand.

The combination of an internationally trusted brand with the comfort of a locally owned and operated company means that you will always get the best products, the best local service and the best local support.

Based in Wellington with a further 4 support offices throughout New Zealand, Black Diamond Technologies Limited is here to help.



Our Vision – Creating New Zealand’s Sustainable Future

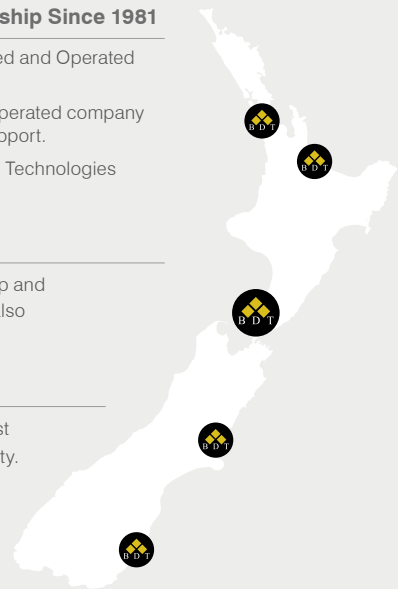
Black Diamond Technologies Limited in partnership with Mitsubishi Electric, strives to develop and introduce new technologies for New Zealanders that will make lives more comfortable while also creating a greener tomorrow.

Our Nationwide Trained Specialist Installation Network

Mitsubishi Electric Heat Pumps are installed through an extensive network of trained specialist dealers. This ensures you are supported with a superior level of product and installation quality.

Full 5 Year Warranty

Peace of mind is assured with your choice of Mitsubishi Electric Heat Pumps – supported by a comprehensive 5 year parts and labour warranty.



For more information please visit our website or call our Customer Service Team.

mitsubishi-electric.co.nz | 0800 784 382



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PLEASE LOOK AFTER THE ENVIRONMENT AND RECYCLE



Black Diamond Technologies Limited



Exclusive New Zealand Partner Since 1981

