



Heat Pumps

Deluxe FH Series

High Wall Mounted

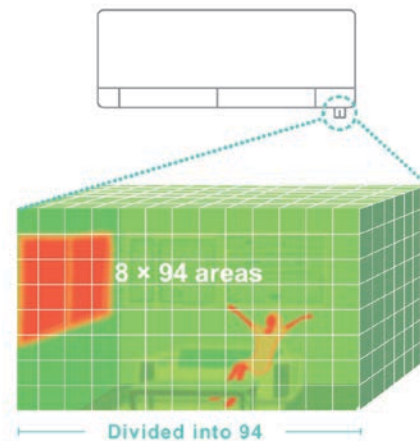
The Deluxe FH High Wall Series truly is the flagship amongst heat pumps. New advanced features provide unparalleled comfort and energy efficiency. Plasma Quad Filtration, a unique 3D i-See Sensor, Dual Split Vanes, and Natural Air Flow function – the Deluxe FH Series has set a new benchmark in true customised comfort.



3D i-See Sensor

Exclusive to the Deluxe FH Series, the 3D i-See Sensor continuously analyses the temperature profile of a room to detect hot and cold spots. This intelligent 8-element sensor simultaneously scans the entire room and divides it into 752 three-dimensional zones, measuring the temperature in each to detect the exact position of its occupants based on their heat signatures.

The perfect amount of heating or cooling can be customised based on preference. The 3D i-See Sensor is also an intuitive occupancy sensor that, after a set period of absence, will switch to energy saving operation, raising or lowering the set temperature by 2°C as required. This can lead to energy savings of up to 10%.



Optional HyperCore®

New Zealand's best low temperature heating performance, guaranteed.

While ordinary heat pumps produce less heat below 7 degrees, only Mitsubishi Electric HyperCore® Technology guarantees its fully rated capacity right down to -15 degrees and, continued heating right down to -25 degrees. HyperCore® offers the most advanced high performance heating available in New Zealand. See the HyperCore® section for more detail.

Features

HyperCore® Option	Occupancy Sensor	3D i-See Sensor	Dual Split Vane Technology
Energy Star® Mark	Advanced Plasma Quad Filtration	7-Day Controller	Natural Airflow (Cooling & Fan Modes Only)
Low Standby Power Usage	Wi-Fi Control Upgrade Option		

Small Room



MSZ-FH25VE

Heating Capacity: 3.2 kW (1.8kW~5.5kW)



MSZ-FH25VEHZ **HYPERCORE™**

Heating Capacity: 3.2 kW (1.0kW~6.3kW)



Medium – Large Room



MSZ-FH35VE

Heating Capacity: 4.0 kW (1.0kW~6.3kW)



MSZ-FH50VE

Heating Capacity: 6.0 kW (1.7kW~8.7kW)



MSZ-FH35VEHZ **HYPERCORE™**

Heating Capacity: 4.0 kW (1.0kW~6.6kW)



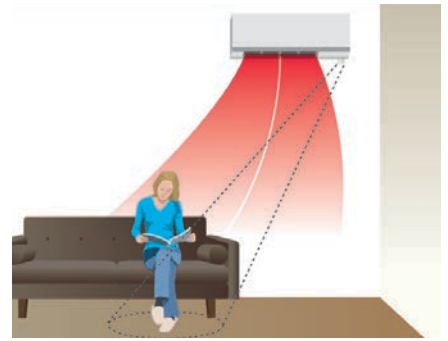
MSZ-FH50VEHZ **HYPERCORE™**

Heating Capacity: 6.0 kW (1.7kW~8.7kW)



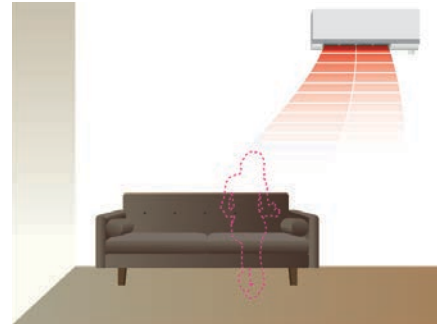
Occupancy Sensor

The Deluxe FH Series is equipped with advanced absence detection software which when utilised in tandem with the 3D i-See Sensor is clever enough to detect when you are no longer in the room. Once the unit senses a lack of occupants after a set period, it automatically switches to energy saving operation. When occupants return, the 3D i-See Sensor detects the change and reverts to the pre-set mode.



Energy Saving Detection

Absence Detection actively works to minimise potential energy waste by automatically raising or lowering the temperature by 2°C in Energy Saving Mode, enabling a potential energy saving of up to 10%.



Dual Split Vane Technology

The Deluxe FH Series unique split vane design allows airflow to be customised to suit different areas of the room, by independently directing air upwards, downwards or to the side. This flexibility can also prevent air from striking obstacles, or direct air to areas that require additional heating or cooling. Split vane airflow is ideal for multi level hallways in homes.

The split vane design also means individual preferences can now more easily be accommodated. You prefer to feel the heat directly but others do not? Simple! A breakthrough in comfort, the split vane design means direct and indirect air flow modes can be customised to suit both occupants in the room at the same time.



Natural Airflow (Cooling & Fan Modes Only)

If you thought all air conditioners feel drafty in cooling mode – think again! The unique Natural Air Flow function recreates a light and gentle airflow that feels as natural as possible by automatically modulating fan speed and direction.

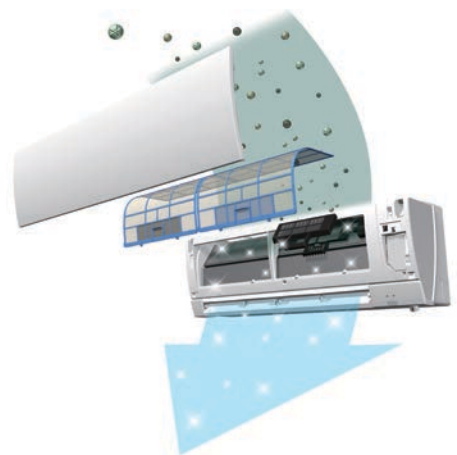


Advanced Plasma Quad Filtration

The Plasma Quad Filter System is an advanced, multi-stage filtration system designed to effectively neutralise contaminants such as allergens, viruses and bacteria. This ensures the circulation of fresh, clean air back into the room.

The Plasma Quad Filter is charged with an electrical field which acts as a micro mesh 'curtain' across the air inlet opening, effectively catching dust particles, allergens, bacteria and viruses with 99% efficiency (independently tested in a 25m³ room).

In addition, two air purifying filters, one equipped with deodorising capabilities, effectively neutralise odours from the air. This level of advanced filtration system is ideal for those suffering from asthma and other airborne allergies.





6 Star Energy Efficiency



All models in the Deluxe FH High Wall Range have been awarded the Energy Star® mark reflecting they are among the most energy efficient heat pumps available in New Zealand. The FH25 model even boasts a 6 Star Energy Rating – which means super energy efficient performance all winter long.



Low Standby Power

Many electrical appliances still consume power while left in standby, having a real effect on your power bill. The new Deluxe FH Series, incorporating cutting edge power reduction technology, boasts 1W standby power, a reduction of around 90% on previous standby power consumption.



7-Day Controller

All Deluxe FH Series Heat Pumps feature a built in 7-Day timer, allowing you to program up to four time and temperature settings for each day of the week. You can now return to comfort without having to lift a finger. Perfect for anyone with a busy lifestyle, the 7-Day Controller is a great way to regulate your energy usage without compromising on comfort.



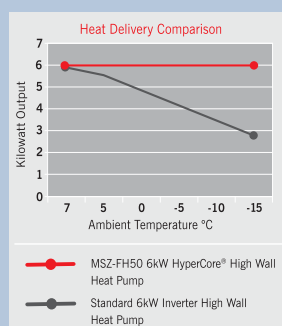
Wi-Fi Control Upgrade Option

Control your heat pump from anywhere with Mitsubishi Electric Wi-Fi Control! Available with Deluxe FH Series Heat Pumps.



HyperCore® Technology by Mitsubishi Electric is specifically designed for New Zealand's winter conditions. While ordinary heat pumps produce less heat below 7 degrees, only HyperCore® guarantees its fully rated capacity right down to -15 degrees so you get all the heat you paid for.

Optional HyperCore® Technology



As this graph 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 HyperCore® FH50 continues to deliver the full 6kW you paid for.

HyperCore® Compressor

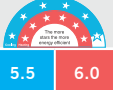
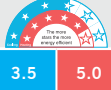
HyperCore® Heat Pumps are fitted with a 'heating caulking compressor' unique to Mitsubishi Electric. The compressor is extremely efficient in its construction and performance, capable of moving more vapour volume for less energy input. This allows the compressor to maintain higher revolutions and, more importantly, maintain efficiency.

HyperCore® Advanced Defrost Logic

When temperatures drop below zero degrees ice will build up on the outdoor unit of any heat pump. How your heat pump reacts to this determines how effective it will be in providing heat to your home. To remove the ice build up the heat pump will need to go into "defrost" during which time the heat pump will not be delivering heat into your home. HyperCore's unique defrost logic has been fine tuned to decrease the number of defrost periods required and optimise its heating performance.



Specifications

QUICK GLANCE	TYPE	High Wall					
	SERIES	MSZ-FH Series (S-M Room)			MSZ-FH Series - HYPERCORE™ (S-M Room)		
	MODEL	MSZ-FH25VE	MSZ-FH35VE	MSZ-FH50VE	MSZ-FH25VEHZ	MSZ-FH35VEHZ	MSZ-FH50VEHZ
	INDOOR UNIT	MSZ-FH25VE	MSZ-FH35VE	MSZ-FH50VE	MSZ-FH25VE	MSZ-FH35VE	MSZ-FH50VE
	OUTDOOR UNIT	MUZ-FH25VE	MUZ-FH35VE	MUZ-FH50VE	MUZ-FH25VEHZ	MUZ-FH35VEHZ	MUZ-FH50VEHZ
	COOL	2.5kW 5.06 EER 20 dBA*	3.5kW 4.19 EER 21 dBA*	5.0kW 3.66 EER 27 dBA*	2.5kW 5.06 EER 20 dBA*	3.5kW 4.19 EER 21 dBA*	5.0kW 3.66 EER 27 dBA*
	HEAT	3.2kW 5.49 COP 20 dBA*	4.0kW 4.90 COP 21 dBA*	6.0kW 4.11 COP 25 dBA*	3.2kW 5.49 COP 20 dBA*	4.0kW 4.90 COP 21 dBA*	6.0kW 4.11 COP 25 dBA*
ENERGY STAR®							
ENERGY RATING							

COOL	Capacity	Rated	[kW]	2.5	3.5	5.0	2.5	3.5	5.0
		Min-Max	[kW]	1.4 - 3.5	0.8 - 4.0	1.9 - 6.0	0.8 - 3.5	0.8 - 4.0	1.9 - 6.0
	Input	Rated	[kW]	0.51	0.86	1.38	0.51	0.86	1.38
	EER			5.06	4.19	3.66	5.06	4.19	3.66
	AEER			5.03	4.18	3.65	5.03	4.18	3.65
	Star Rating			5.5	3.5	2.5	5.5	3.5	2.5
	Sound Level	In (Quiet)	[dBA]	20	21	27	20	21	27
		In (low-SHi*)	[dBA]	23-29-36-42	24-29-36-42	31-35-39-44	23-29-36-42	24-29-36-42	31-35-39-44
		Out (SPL*)	[dBA]	46	49	51	46	49	51
	Rated Current (In+Out)			[A]	2.7	4.0	6.1	2.7	4.0
Max. Current			[A]	9.6	10	14	9.6	10	14
Air Volume In (SHi*)			[L/s]	193	193	206	193	193	206

HEAT	Capacity	Rated	[kW]	3.2	4.0	6.0	3.2	4.0	6.0
		Min-Max	[kW]	1.8 - 5.5	1.0 - 6.3	1.7 - 8.7	1.0 - 6.3	1.0 - 6.6	1.7 - 8.7
		@ -15 °C	[kW]	**	**	**	3.2	4.0	6.0
	Input	Rated	[kW]	0.58	0.80	1.48	0.58	0.80	1.48
	COP			5.49	4.90	4.11	5.49	4.90	4.11
	ACOP			5.46	4.88	4.10	5.46	4.88	4.10
	Star Rating			6.0	5.0	3.5	6.0	5.0	3.5
	Sound Level	In (Quiet)	[dBA]	20	21	25	20	21	25
		In (Low-SHi*)	[dBA]	24-29-36-44	24-29-36-44	29-34-39-46	24-29-36-44	24-29-36-44	29-34-39-46
		Out (SPL*)	[dBA]	49	50	54	49	50	54
	Rated Current (In+Out)			[A]	2.9	3.8	6.5	2.9	3.8
Max. Current			[A]	9.6	10	14	9.6	10	14
Air Volume In (SHi*)			[L/s]	220	220	243	220	220	243

Controller	Standard		Infra Red Remote with 7-Day Controller					
	Optional Wired 7-Day Timer		Optional: PAR-31					
Adaptor	Optional Wi-Fi Adaptor		Optional: MAC-558IF-E					
Power Supply	(Powered from outdoor unit)		230 / Single Phase / 50 Hz					
Indoor	Dimensions (WxDxH)	[mm]	925 x 234 x 305 (+17)					
	Weight	[kg]	13.5					
Outdoor	Dimensions (WxDxH)	[mm]	800 x 285 x 550		840 x 330 x 880	800 x 285 x 550		840 x 330 x 880
	Weight	[kg]	37		55	37		55
	Sound Level - SPL*/Power (Cooling-Heating)	[dBA]	46 - 49	49 - 50	51 - 54	46 - 49	49 - 50	51 - 54
Piping	Diameter (Liquid/Gas)	[mm]	6.35 / 9.52	6.35 / 9.52	6.35 / 12.7	6.35 / 9.52	6.35 / 9.52	6.35 / 12.7
	Max. Length/Height†	[m]	20 / 12	20 / 12	30 / 15	20 / 12	20 / 12	30 / 15
	Chargeless Piping Length	[m]	7	7	7	7	7	7
Operation Range Outdoor	Cooling	[°C]	-10 / +46	-10 / +46	-10 / +46	-10 / +46	-10 / +46	-10 / +46
	Heating	[°C]	-15 / +24	-15 / +24	-15 / +24	-25 / +24	-25 / +24	-25 / +24
Colour			White					



5 Year Warranty

The Mitsubishi Electric Heat Pumps listed in this table come with a full 5 year parts, labour, and compressor warranty. Warranty conditions apply.

August 2015



For more information on Mitsubishi Electric Heat Pumps, please call our customer service team on **0800 784 382** or visit **www.mitsubishi-electric.co.nz**