

# ZUBA-CENTRAL™

Heating & Cooling. Evolved.



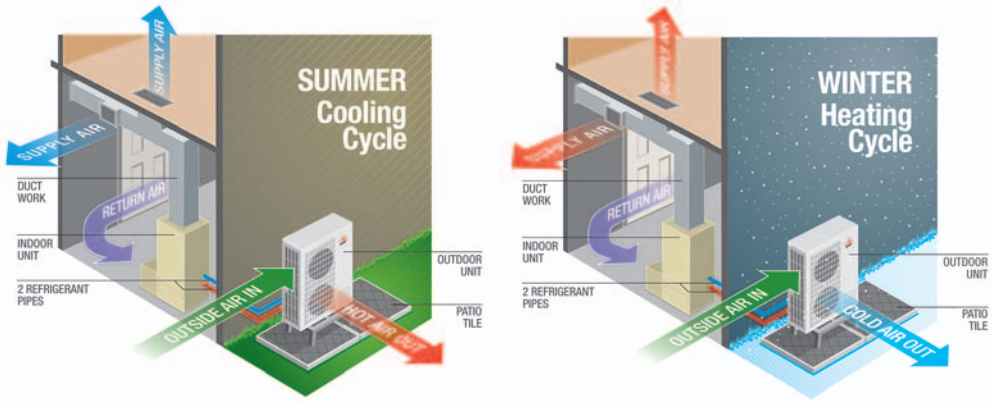
HEATING AND AIR CONDITIONING FOR  
WHOLE-HOME, YEAR-ROUND COMFORT

Energy-efficient. Easy to install. Extremely quiet.  
Zuba-Central is simply the new and better way to heat  
and cool your home or small business.



**MITSUBISHI ELECTRIC**  
*Changes for the Better*

# THE ZUBA-CENTRAL HEAT PUMP



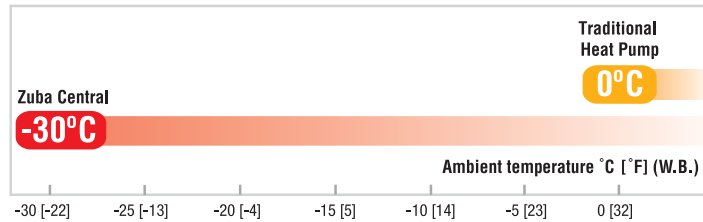
Zuba-Central is a Heat Pump which provides heating and cooling to your home through ductwork. It is ranked among the most energy-efficient and cost-effective ways of transferring heat from one place to another.

## OUTSTANDING PERFORMANCE

Zuba-Central's unique H<sup>2</sup>i technology has you covered even during the coldest winter days.

Compared to other means of heating, heat pumps are very efficient, but only as long as outside temperatures stay above 0°C. From this point and below, a supplemental heating system has to be used.

Now with Zuba-Central, not only will you get the benefits of a heat pump above 0°C, but all the way below!



### HYPER-HEAT INVERTER (H<sup>2</sup>i)

The secret behind Zuba-Central's high-heating performance, even under extremely low outdoor temperatures, is our exclusive Hyper-Heat Inverter (H<sup>2</sup>i) technology. It maximizes the benefits and efficiencies you can get from a heat pump.

In addition, the unique defrost mechanism provides an extended period of continuous heating between the defrost time, and minimizes the defrost time required, proving yet again that Zuba-Central is one of the most efficient systems on the market.

## EFFICIENTLY GREEN

### Thinking Green Has Never Been So Efficient.

Now you can keep more money in your pocket while reducing your carbon footprint. The Zuba-Central system uses ozone-friendly R-410A refrigerant which produces no CFCs or HCFCs, and has zero Ozone Depletion Potential (ODP). This is not only beneficial to the environment but also translates into better overall performance and energy efficiency than traditional R-22 based systems.

Through the use of our VSCI Technology (Variable Compressor Speed Inverter) the Zuba-Central system is able to dynamically adjust heating and cooling capacities to match actual requirements of your home, which means you pay only for the required energy when you need it.

Zuba-Central is an Energy Star® qualified heat pump with a SEER<sup>1</sup> of 15.0 and EER<sup>2</sup> of 12.0 in cooling mode, and an HSPF<sup>3</sup> of 9.4 in heating mode. Together with a high-efficiency ECM motor, you can be sure that you're always getting the most from your utility bill and giving the most back to the environment.

1. SEER (Seasonal Energy Efficiency Ratio) 2. EER (Energy Efficiency Ratio) 3. HSPF (Heating Seasonal Performance Factor)

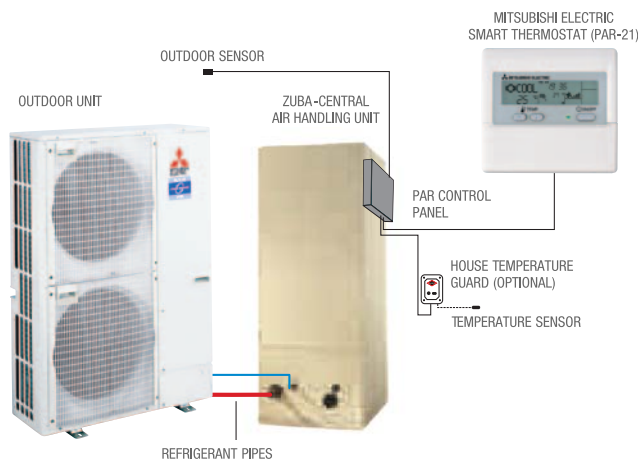


# A COMFORTING CHOICE

Zuba-Central+ has you covered in those rare instances when extreme temperature hits the air. It can be equipped with your choice of an auxiliary Electric Resistance Heater or Hydronic Hot Water Coil that operates simultaneously with Zuba-Central only when additional heat is needed. So even during the coldest days, your Zuba-Central+ package is still pumping heat indoors with the superb efficiency that only a heat pump can offer.

Zuba-Central+ is available with Electric Resistance Heater option from 2.5kW to 17.5kW, or with 3-row Hydronic Hot Water Coil option with pump. It is also available with SCR duct heater option for enhanced efficiency. Please ask your local dealer which option best meets your requirements.

## Zuba-Central+ Packages 1 & 2 include a Mitsubishi Electric Smart Thermostat which will notify of malfunctions by error codes.



### Mitsubishi Electric Smart Thermostat (PAR-21)

- Programmable Timer - up to 8 settings per day
- Self-diagnosis function
- Multi-language display (8 languages)

## PACKAGE 1

Connectable to auxiliary Electric Resistance Heater

Package Includes:

- Zuba-Central Outdoor Unit
- Zuba-Central Air Handler
- Mitsubishi Electric Smart Thermostat (PAR-21)
- Optional Electric Resistance Heater 2.5kW / 5kW / 7.5kW / 10kW / 12.5kW / 15kW / 17.5kW
- Optional House Temperature Guard (HTG)\*

## PACKAGE 2

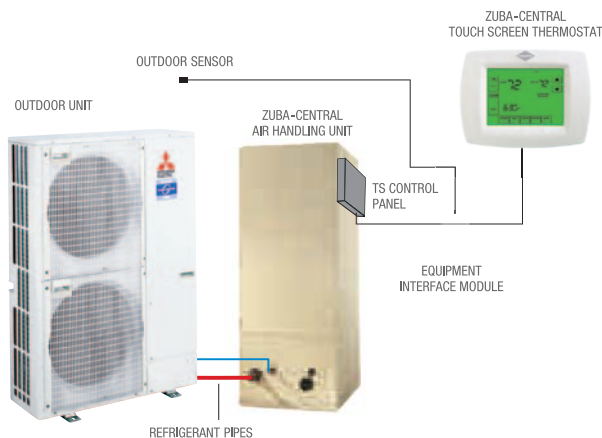
Available with auxiliary Hydronic Heating Coil

Package Includes:

- Zuba-Central Outdoor Unit
- Zuba-Central Air Handler with 3-row Hydronic heating coil and pump
- Mitsubishi Electric Smart Thermostat (PAR-21)
- Optional House Temperature Guard (HTG)\*

\*HTG will maintain the house temperature in the event of heat pump failure.

## Zuba-Central+ Packages 3 & 4 include a Canadian-style thermostat, and can also be integrated to a zone control system.



### Zuba-Central Touch Screen Thermostat

- 7-Day Programmable Timer
- Controls temperature and indoor air quality products
- Energy Saving Program to save annual heating and cooling costs

## PACKAGE 3

Connectable to auxiliary Electric Resistance Heater

Package Includes:

- Zuba-Central Outdoor Unit
- Zuba-Central Air Handler
- Zuba-Central Touch Screen Thermostat and Equipment Interface Module
- Optional Electric Resistance Heater 2.5kW / 5kW / 7.5kW / 10kW / 12.5kW / 15kW / 17.5kW

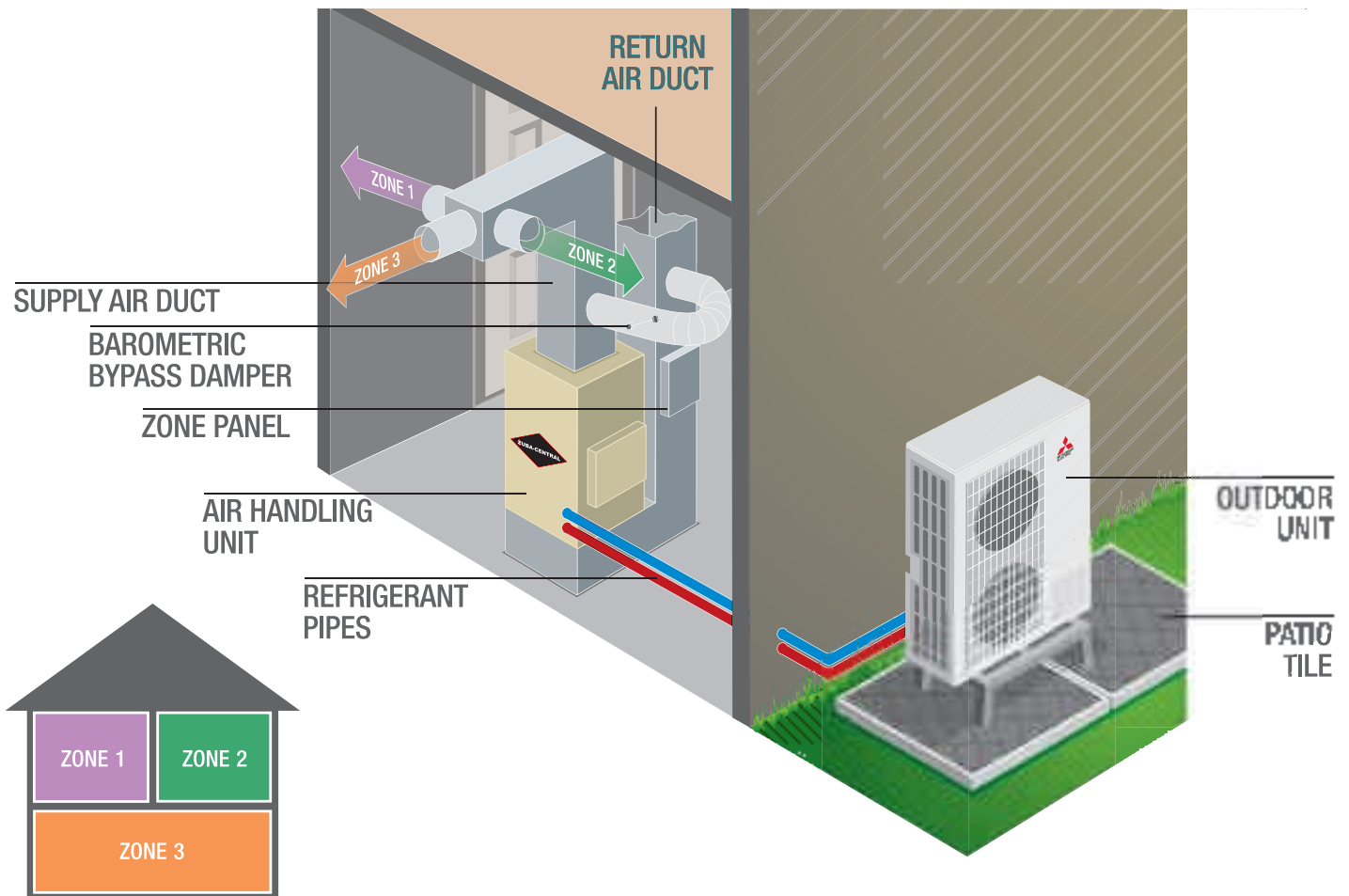
## PACKAGE 4

Available with auxiliary Hydronic Heating Coil

Package Includes:

- Zuba-Central Outdoor Unit
- Zuba-Central Air Handler with 3-row Hydronic heating coil and pump
- Zuba-Central Touch Screen Thermostat and Equipment Interface Module

# INSTALLATION & GLOSSARY



**Zone Control** – By dividing a home into multiple zones, each area can have a customized level of comfort. Each zone has a separate thermostat to control the zone’s damper to open, close, or adjust its operation as needed while Zuba-Central matches its output based on each zone’s demand to maximize energy efficiency.

**Supply Air Duct** – Delivers conditioned hot or cool air to each area in a home.

**Air Handling Unit** – Houses a refrigerant coil which heats or cools the return air, and the enclosed blower motor moves the conditioned air around the house.

**Return Air Duct** – Brings air from each area in a house back to the Air Handling Unit for reconditioning.

**Barometric Bypass Damper** – When a zone damper closes, the air pressure in the Supply Air Duct will increase and affect the airflow throughout the entire HVAC system. As the air pressure increases, this damper will open to bypass some of the supply air back to the Return Air Duct in order to maintain a balanced air pressure and constant airflow.

**Zone Panel** – Communicate with thermostats to control the operations of Zuba-Central and dampers for each zone.

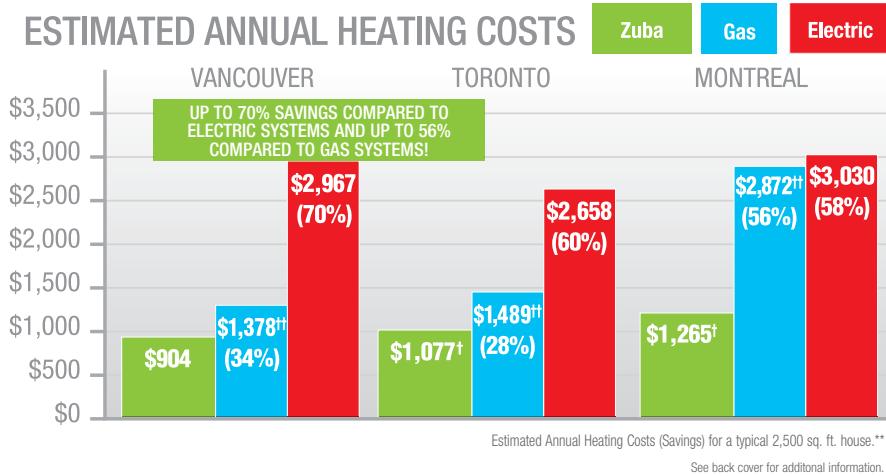
**Outdoor Unit** – Houses a refrigerant coil which absorbs ambient heat in heating mode and releases heat in cooling mode.

**Refrigerant Pipes** – Two small-diameter copper pipes that transfer refrigerant in liquid and gaseous forms between the Outdoor Unit and the Air Handling Unit.

**Outdoor Sensor** – Monitors outdoor air temperature.

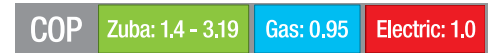
# THE ADVANTAGES OF EVOLUTION

## TECHNOLOGY YOU CAN TAKE TO THE BANK



## HOW MUCH AM I REALLY SAVING AND WHAT DO ALL THE NUMBERS MEAN?

Coefficient of Performance (COP) is a standard measurement of how much energy you get out of every unit of fuel input. The higher the number, the more savings you can get from your utility bill.



Even the most efficient gas furnaces only provide fuel efficiencies of up to 95%, or COP of 0.95. And for electric resistance heaters, their COP equals 1. Zuba-Central's COP ranges from 1.4 to 3.19, depending on the outside temperature. It actually gets more efficient as temperatures increase!

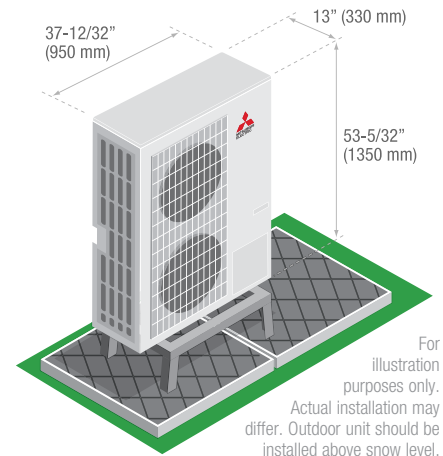
Historically gas prices have been higher than electricity, and the trend leans toward them going higher, which makes Zuba-Central a truly economical choice for today and the future.

## TINY FOOTPRINT, MASSIVE IMPROVEMENT

### SLIMMER THAN A BACKYARD TILE.

The Zuba-Central outdoor unit measures only 13 inches (33 cm) thick – which sits perfectly alongside your exterior wall and takes up a lot less real-estate than a traditional A/C system. It is so compact that you can have it installed anywhere around your premises without taking up your valuable patio space.

The indoor Air Handling Unit is smaller than a gas furnace, and fits right onto your existing ductwork. Everything is efficiently housed in a single unit.



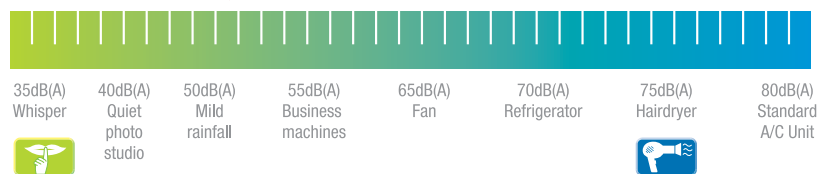
## QUIETLY OUTPERFORMING

### YES. IT'S RUNNING!



You may not even realize your Zuba-Central system is hard at work keeping temperatures steady and bringing you home comfort. Our advanced technology ensures super-quiet units that work vibration-free.

### Zuba-Central As low as 52dB(A)



**ZUBA-CENTRAL** IS SIMPLY THE NEW AND BETTER WAY TO PROVIDE YEAR-ROUND HEATING & COOLING COMFORT.

**MADE FOR CANADA**, THIS EASY-TO-INSTALL, MONEY AND SPACE-SAVING SYSTEM WILL FOREVER CHANGE THE WAY YOU EXPERIENCE HEATING & AIR CONDITIONING.

Model	Zuba-Central	
Cooling	Rated Capacity	34,000 Btu/h
	Rated Input	2,865 W
	EER	12.0
	SEER	15.00
System Operating Temperature Range - Cooling	Indoor	D.B. 66 – 90°F (19 – 32°C) W.B. 59 – 73°F (-15 – 23°C)
	Outdoor	D.B. 0 – 115°F (-18 – 46°C)*
Heating	Max. Capacity	40,000 Btu/h
	Max. Input	3,670 W
	HSPF	9.4
System Operating Temperature Range - Heating	Indoor	D.B. 63 – 83°F (17 – 28°C)
	Outdoor	D.B. -22 – 70°F (-30 – 21.1°C) W.B. -22 – 59°F (-30 – 15°C)

\*with wind baffle

## WARRANTY

For over 80 years, Mitsubishi Electric has been a leader in the design and manufacture of reliable, high-quality electronic and electrical equipment, both for the consumer market as well as for corporate and industrial customers. Our commitment to innovation and technology is exceeded only by our commitment to service – we stand behind every product that bears the Mitsubishi Electric name. Beyond our standard 5-year parts and 7-year compressor warranty, all Zuba-Central systems

**10 YEAR  
COMPRESSOR  
WARRANTY\***

installed by an Authorized HVAC Installer will receive an upgrade to an extended 10-year compressor warranty. It's just one less thing to worry about.

\*When installed by an Authorized HVAC installer.

†† Cost calculation estimated based on a gas furnace with COP of 0.85.

† Cost calculation estimated based on a Zuba-Central system with a 10kW supplementary heater which only operates when heat loss cannot be met by Zuba-Central alone.

\*\* Mitsubishi Electric Canada provides these figures without inducing obligation or liability. Figures may vary depending on application and rates from different energy providers. For an accurate account of potential savings Mitsubishi Electric Canada recommends a thorough energy audit to be completed by a qualified dealer or technician.



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*Changes for the Better*

[www.Zuba-Central.ca](http://www.Zuba-Central.ca)

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