



Heating and Cooling




National Sponsor of the CaGBC

## **Sustainable Comfort Solutions For Your Buildings**

*Inspired by the world.  
Made for the Canadian Climate.*

An aerial photograph of a city skyline, likely New York City, is shown from a high angle. The image is partially obscured by a large, solid red diagonal shape that cuts across the frame from the top-left to the bottom-right. The text 'Table of Contents' is overlaid in white on the red area.

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# Mitsubishi Electric Heating and Cooling Canada

Established in 1979, Mitsubishi Electric Sales Canada Inc. provides an extensive line of commercial and residential products including heating and air conditioning, energy recovery and fresh air ventilators, water heating and cooling technology, and more. Mitsubishi Electric continues to not only be a market leader in the Canadian market, but also throughout the world, pioneering global innovation for 100 years in the manufacturing, marketing and sales of electrical and electronic equipment used in information processing and communications, industrial technology, energy, transportation and construction. No matter what you do, where you live, work or play, chances are a Mitsubishi Electric product enhances the quality of your life.

### Vision

To be the most trusted industry leader in providing innovative heating, cooling and ventilation technology engineered specifically for Canadian climates.

### Mission

To deliver quality comfort and value to all Canadians through leading-edge engineering, locally inspired design, and a dedication to superior service.

Leading global innovation for

**100** yrs

# 7 Guiding Principles

Mitsubishi Electric Heating and Cooling is dedicated to continually improving our technologies and services by applying creativity to all aspects of our business. From VRF technology to Energy Recovery Ventilators, all of our innovations are inspired by our Seven Guiding Principles.

## 1 Trust

- | Establish relationships with society, customers, shareholders, employees, and business partners
- | based on strong mutual trust and respect.

## 2 Quality

- | Provide the best products and services with unsurpassed quality.

## 3 Technology

- | Pioneer new markets by promoting research and development, and fostering technological innovation.

## 4 Citizenship

- | As a global player, contribute to the development of communities and society as a whole.

## 5 Ethics and Compliance

- | In all endeavours, conduct ourselves in compliance with applicable laws and high ethical standards.

## 6 Environment

- | Respect nature, and strive to protect and improve the global environment.

## 7 Growth

- | Assure fair earnings to build a foundation for future growth.

# Environmental Sustainability Vision 2050

*Leading The Way To Global Sustainability*



The Environmental Sustainability Vision 2050 is the long-term environmental management vision of the Mitsubishi Electric Group. We are committed to solving various factors that lead to environmental issues and uniting the wishes of each and every person to strive to create new value for a sustainable future. Our environmental declaration states, we shall protect the air, land, and water with our heart and technologies to sustain a better future for all.

## Three Environmental Action Guidelines & Key Initiatives

### 1

**Apply diverse technologies in wide-ranging business areas to solve environmental issues**

- Climate Change Measures
- Resource Circulation
- Live in Harmony with Nature

### 2

**Challenge to develop business innovations for future generations**

- Long-term Activities
- Innovation
- Nurturing Human Resources

### 3

**Publicize and share new values and lifestyles**

- Understanding Needs
- Co-create and Disseminate New Values
- Live in Harmony with the Region

# Global Innovation Tailored for Canada

**F**or over 40 years, Mitsubishi Electric Sales Canada Inc. has been serving the Canadian market with dedicated offices located throughout the country to meet the specific needs of the uniquely demanding Canadian climate. Backed by Mitsubishi Electric's global resources and 100 years of innovation, our technical experts and application specialists have a thorough understanding of the obstacles and challenges a climate as harsh and varied as Canada presents. With this knowledge, our team provides products and support tailor made for contractors, design-engineering firms, architects and building owners throughout the country.





# Key Advantages of Mitsubishi Electric Sales Canada

## A World of Innovation Tailored for Canada

Backed by Mitsubishi Electric's exclusive technologies like VCSi, VRF and H2iTM, Mitsubishi Electric Sales Canada's HVAC products are engineered to perform at the highest levels of efficiency and comfort, even in the most demanding climates.

## Local Availability

With extensive warehousing facilities strategically located in Canada including Ontario and B.C., we are positioned to facilitate optimum order fulfillment and meet timelines even with limited notice.

## Global Sustainability

Through our Environmental Sustainability Vision 2050, we aim to facilitate the creation of a low carbon economy through product innovation and the continuous improvement of energy efficient technology.

## Product Training and Technical Support

We are committed to providing our dealers, contractors and distributors with industry best product technical support and all the resources and training to do their jobs safely and efficiently.

## Engineering Sales and Application Support

- Engineered Solution Proposals Direct to Developers and Owners
- Provide Integrated system and solutions
- Provide early concept design to Developer, Owner and to Consulting Engineers
- Optimize design solutions
- Add value in design process of projects

**At Mitsubishi Electric Heating and Cooling, we are passionate about our work, our products and the industry we work in. We are an enthusiastic team of experienced HVAC professionals, and will always provide the best innovative HVAC solutions for your projects. From technology to service, you can Expect Amazing in all that we do."**

*—Commercial Sales Manager, Syed Abid, Mitsubishi Electric Sales Canada Inc.*

OVER

30

Years  
Serving You

Mitsubishi Electric opened the HVAC Division in Canada with the sale of its Mr. Slim® product line, notably being the first company to introduce ductless technology to the market.

Introduced the P-Series as the first -40°C product to provide low ambient cooling.

Introduced Lossnay and Renewaire into the product mix to focus on ventilation solutions.

First manufacturer to introduce VRF technology in the Canadian market.

First City Multi VRF system was sold.

Launch of City Multi Water Source Geo-thermal system.

Introduced Zuba Central, with Hyper Heat (H2i™) technology.

1987

1996

1998

1999

2001

2004

2007



# 2020

Continuing completion of Westman Village - The largest operational development using P-Series product in North America.

Continuation of the Sifton West 5 Development where the homes have been and will continue to be labeled under CHBA Net Zero Home Program.

2008	First shipment of Zuba Central, a whole home ducted solution	Mitsubishi Electric British Columbia Branch opens, the first and only direct sales office for Mitsubishi Electric in North America	Relocation of the BC Branch to a new larger and custom fit facility, growing from 2000 to 8000 square feet.	Started to sell the ECODAN model, an air to water heat pump.	First Building in Canada to receive a Zero Carbon Building Design Certification by the CaGBC, using water-source VRF technology – evol1, Waterloo, ON
2009	Launch of City Multi PWFY (Refrigerant to Water Heat Exchanger)	First project involving “TG2000 Energy consumption monitoring” was Place des Nations located in St-Laurent, Quebec.	First to introduce 575v based VRF System.	First Net Zero Building to use heat pump technology using Zuba Central.	Launch of the Climaveneta product line, introducing the reversible air source heat pump.
2012				First LEED® Gold Building in Canada to apply VRF technology	Launch of the MLZ One-way ceiling cassette.
2013				First manufacturer in the market to integrate VRF technology with Dedicated Outdoor Air Systems	
2017					
2018					

# Rising Above The Rest

## CITY MULTI



City Multi Outdoor



City Multi offers a wide range of solutions that will seamlessly adapt to any building requirements, from medium to large residential projects and light commercial applications to hotels and large building complexes. Whether your project requires a water source system or an air source system, all of our heating and cooling products offer an extensive assortment of compact and stylish indoor units for both ducted and ductless installations.

### Multiple Advantages

- Versatile Configurations
- Ease of Installation
- Energy Efficiency
- Flexible Applications
- Air Handler Unit capability with LEV kits

### Heat Recovery

City Multi features the world's first 2-pipe VRF heat recovery system, allowing for simultaneous heating and cooling.

### City Multi 575V

The 575V VRF system was specifically designed to meet the very precise needs of major institutional, commercial, and industrial operations in Canada. This innovative technology results in:

- A significant downsizing of your building's electrical infrastructure requirements (Ampacities of system conductors, protective devices and isolation devices).
- The elimination of step down transformers.
- Reduced installation time.
- Up to 30% savings on installation cost

### City Multi Indoor

With a vast selection of City Multi indoor models we have the perfect solution for any space or application.

### City Multi Air Source

Increased efficiencies make this outdoor unit ideal for projects with efficiency goals such as LEED® certification or net zero status.

### City Multi Water Source

For buildings that have restricted exterior access or simply for energy-efficient, green buildings.

### LEV Kits

Ability to retrofit current systems with LEV Kits in order to leverage efficiencies of VRF.



## The Most Advanced Technology

### Variable Refrigerant Flow Technology (VRF)

VRF technology utilizes only 2 refrigerant pipes to dynamically adjust refrigerant flow in order to meet actual load requirements, resulting in energy efficiency, space and cost savings.

### Hyper-Heat Inverter (H2i™) Technology.

We've taken heating to a whole new level with our exclusive, Hyper-Heat Inverter (H2i™) technology. Even when temperatures drop to -30°C\*\* – a challenge for many competitive air-source heat pump systems – City Multi stays on the job, keeping the indoors at a comfortable and consistent level with ease.



Learn more about City Multi at: [mitsubishielectric.ca/en/hvac/professionals/city-multi](http://mitsubishielectric.ca/en/hvac/professionals/city-multi)



\*When installed by a Diamond Level Contractor



\*\*All version of models MXZ-4C36NAHZ, MXZ-5C42NAHZ, MXZ-8C48NAHZ. Includes tolerance. Units can operate down to -30°C and beyond, depending on conditions.

# Reversible Air Source Heat Pump



Focus on your vision. Not low-carbon constraints. You don't need to compromise to meet the standards of the new low-carbon economy. With innovative solutions from Climaveneta®, a brand by Mitsubishi Electric, you'll have the flexibility and energy efficiency to bring your vision to life, exactly as you imagine it.



## Now you can have it all:

- 45 years of industry experience
- Low Carbon, High Efficiency
- Flexible Installation
- Sole Heating and Cooling Solution Optimized for Canadian conditions
- Rapid Ambient Temperature Adapting Technology
- Warranty: 5-year Parts and 5-year Compressor\*

\*Conditions Apply. See details of warranty terms at [www.Climaveneta.ca](http://www.Climaveneta.ca)



# Fresh Ventilation Solutions

*Outside Air Makes the Difference*

## ERVs in Canadian Climates

For over 20 years, Mitsubishi Electric has been a pioneer in providing Energy Recovery Ventilator (ERV) solutions for high profile commercial and residential projects all across Canada. Meeting the high and strict demand of performance and efficiency, Mitsubishi Electric continues to be a major contributor to the energy recovery ventilation industry in the Canadian market

## Fresh Innovation From Mitsubishi Electric

Mitsubishi Electric's advanced line of ERVs will help position your building to meet the growing demands for improved indoor air quality (IAQ), energy efficiency, and ultimately aid in the fulfillment of green initiatives and stringent LEED standards. Our range of ERVs and Dedicated Outdoor Air Systems, including LOSSNAV<sup>®</sup>, RenewAire, PremiSys<sup>®</sup>, and PremiSys<sup>®</sup> Fusion, recover up to 80 percent\* of sensible and latent energy from outside air and provide effective ventilation to remove indoor air pollutants such as Carbon Dioxide (CO<sub>2</sub>), formaldehyde, ammonia and volatile organic compounds that are harmful to human's health. Whatever your project's needs, there's a Mitsubishi Electric ventilation solution that will meet or exceed them.



PremiSys DOAS

## The ERV Advantage

- Cleaner Air Supply
- Energy Recovery and Savings
- Free Cooling With Bypass Damper
- Added Occupant Comfort
- Flexible Installation

Learn more about Mitsubishi Electric ERVs at:  
[mitsubishielectric.ca/en/hvac/professionals/Energy-Recovery-Ventilator](http://mitsubishielectric.ca/en/hvac/professionals/Energy-Recovery-Ventilator)





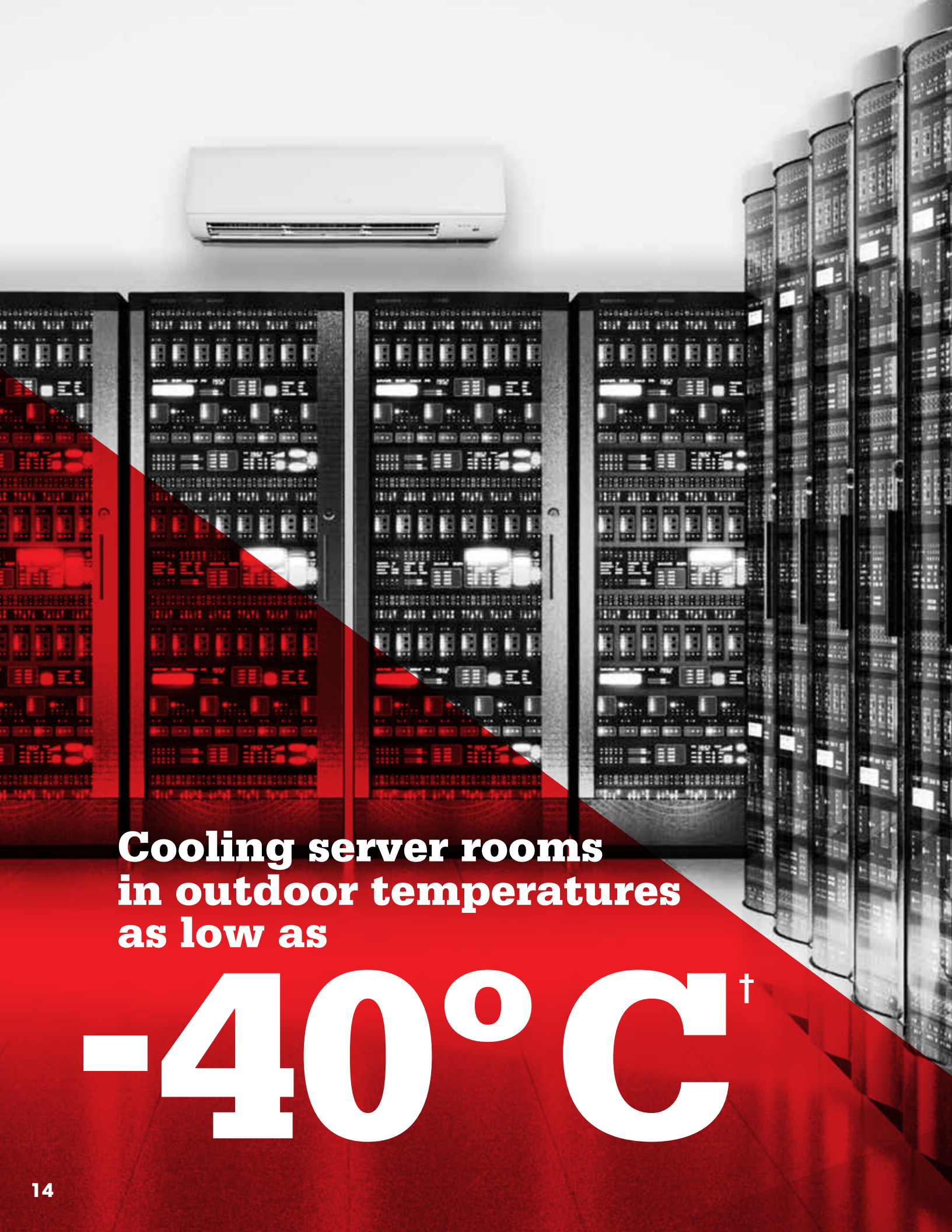
**Recover up to**

**80%\***

of sensible and latent energy from outside air

\*Applicable to models with the LOSSNAY® core.





**Cooling server rooms  
in outdoor temperatures  
as low as**

**-40°C<sup>†</sup>**



# The Ultimate Light Commercial HVAC Technology

## Mr. SLIM® P-Series

Mr. Slim P-Series ducted and ductless heat pumps and air conditioners are compact yet powerful, offering unrivaled energy efficiency and design flexibility. Its advanced technology has been designed and tested to withstand the extremes of the Canadian climate in order to deliver a reliable and proven climate control system that you can trust all year round. With a variety of models to choose from, there's a P-Series solution for any light commercial or large residential application.

### Conditioned To Your Needs

#### Variable Compressor Speed Inverter (VCSi) Technology

Unlike conventional machines which only cycle between On and Off, VCSi systems detect changes in room temperature and readjust the compressor speed to provide high-speed heating or cooling as needed, resulting in energy and cost savings.

### Equipped to Protect

Keeping server/equipment rooms cool is vital to the protection and availability of sensitive and highly confidential valuable information. There's a reason the P-Series is known as THE -40° C/F unit\* – in fact, there are several. Mitsubishi Electric has an immaculate track record of cooling server rooms in outdoor temperatures as low as -40° C/F† for over 25 years. Systems are installed in Canada's coldest climates and have been operating in extreme conditions. There are P-Series units that have been in continuous cooling operation in Canada for over two decades – that's 175,000 running hours and still counting.

Learn more about Mr. Slim P-Series at: [mitsubishielectric.ca/en/hvac/professionals/Mr-Slim-P-Series](http://mitsubishielectric.ca/en/hvac/professionals/Mr-Slim-P-Series)

\*\*All version of models MXZ-4C36NAHZ, MXZ-5C42NAHZ, MXZ-8C48NAHZ. Includes tolerance. Units can operate down to -30°C and beyond, depending on conditions.

\*When installed by an Authorized HVAC (Heating, Ventilation, and Air Conditioning) Installer.

†Requires ME windscreen for operation below -5°C

Outdoor Unit



**10 YEAR**  
PARTS & COMPRESSOR  
WARRANTY

PCA Indoor Unit

### Hyper-Heat Inverter H2i™ Technology

**HYPER**  
HEAT AT  
-30°C

We've taken heating to a whole new level with our exclusive, Hyper-Heat Inverter (H2i™) technology. Even when temperatures drop to -30° C\*\* – a challenge for many competitive air-source heat pump systems – P-Series stays on the job, keeping the indoors at a comfortable and consistent level with ease.

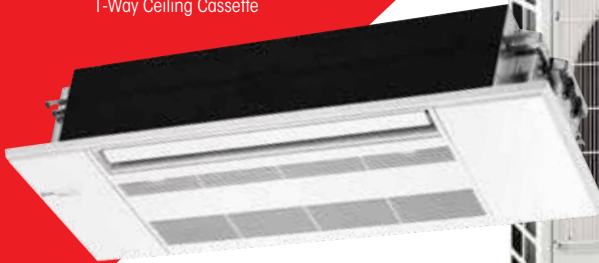
### One Series Fits All

P-Series is the perfect choice for an array of demanding commercial applications:

- Small Office Buildings
- Server/Equipment Room
- Large Open Residential Floor Plans
- Retail Shops
- Restaurant and Kitchens
- Fitness Center
- Schools
- Critical Service, High Reliability Locations
- Hotels
- Hospitals
- Warehouses

# Bringing Comfort Home

1-Way Ceiling Cassette



**10 YEAR**  
PARTS & COMPRESSOR  
WARRANTY



Outdoor Unit

## Mr. SLIM® M-Series

Available as single and multi-split systems, M-Series systems are compact, quiet and energy efficient, providing personalized comfort in a wide array of residential applications. Ducted or ductless, you can trust the quality of Mr. Slim M-Series systems to deliver years of reliable comfort and satisfaction.

### Renovations and New Homes

Mr. Slim M-Series is the perfect solution for renovations, new additions and new homes. The outdoor units come in a wide variety of capacities, are compact and easy to install and camouflage, while indoor units can be installed anywhere in the room – on the ceiling, wall, or floor.

#### Whisper Quiet Comfort

The Mr. Slim M-Series includes whisper-quiet fans and compressors that work so silently you won't even notice they're on. Indoor units operate as low as 19 dBA and our outdoor units are some of the quietest in the industry.

#### Hyper-Heat Inverter H2i™ Technology



We've taken heating to a whole new level with our exclusive, Hyper-Heat Inverter (H2i™) technology. Even when BC temperatures drop to -30°C\*\* – a challenge for many competitive air-source heat pump systems – M-Series stays on the job, keeping the indoors at a comfortable and consistent level with ease.

#### Minimum Energy, Maximum Efficiency

##### Variable Compressor Speed Inverter (VCSi) Technology

Unlike conventional machines which only cycle between On and Off, VCSi systems detect changes in room temperature and readjust the compressor speed to provide high-speed heating and cooling as needed, resulting in energy and cost savings.

Learn more about Mr. Slim M-Series at:  
[mitsubishielectric.ca/en/hvac/professionals/Mr-Slim-M-Series](http://mitsubishielectric.ca/en/hvac/professionals/Mr-Slim-M-Series)

\*\*All version of models MXZ-4C36NAHZ, MXZ-5C42NAHZ, MXZ-8C48NAHZ. Includes tolerance. Units can operate down to -30°C and beyond, depending on conditions.

\*When installed by an Authorized HVAC (Heating, Ventilation, and Air Conditioning) Installer.

#### Multi-Zone Applications

With both single and multi-zone capabilities, the Mr. Slim M-Series can address the individual comfort needs of multiple rooms – all with one system. The MXZ provides superior control and flexibility by heating and cooling up to eight rooms, with just a single outdoor unit.

#### Flexible installation, Ducted or Ductless

Mr. Slim M-Series was designed to have a wide array of applications and configurations. Ducted configurations can easily be implemented into existing ductwork, while ductless configurations are perfect for century homes, cottages, schools, commercial facilities, and more. No matter your space, Mr. Slim M-Series is the answer.

#### Room-to-Room Temperature Control

With our Zoned Comfort Solutions, occupants can customize the temperature of each room to their specific needs, ensuring constant comfort and energy efficiency.



**Indoor units  
operate as low as**

**19 dBA**



# The Highest Degree of Expertise

Mitsubishi Electric provides a wide variety of commercial and residential heating and air conditioning products. Thanks to Mitsubishi Electric's many exclusive technologies like VCSi, VRF and H2i, you can rest assured that all of our HVAC products are engineered to perform at the highest levels of efficiency and comfort. You'll find City Multi in high-rise buildings and hotels, meeting demands from multiple occupants. Working behind the scenes 24/7 is Mr. Slim P-Series, maintaining constant and comfortable temperatures in retail stores, mechanical rooms or server rooms. But whether it's a Mr. Slim supplying heating and cooling to a cottage in northern Ontario, an ERV generating outstanding cost-savings for complex city towers in Montreal, or anything in between, we provide year-round comfort that works for Canada and your customers.

For more information on these products visit [www.MitsubishiElectric.ca](http://www.MitsubishiElectric.ca).

## Local Availability – The Foundation For Fulfillment

Local availability is a key factor in fulfilling orders promptly for both retrofit and new construction projects. With extensive warehousing facilities strategically located in key Canadian sales regions, our team anticipates market product demand to meet timelines reliably, even with limited notice.

## Cold Climate Specific Performance

With established roots in the Canadian market, our HVAC products are uniquely designed to ensure optimum performance year-round in the country's challenging outdoor ambient conditions.

## Pioneers in the Canadian Climate

- Mitsubishi Electric was the first to optimize the operation of Mr. Slim mini-split series to provide server room cooling in ultra-low ambient temperatures as frigid as  $-40^{\circ}\text{C}^{\dagger}$
- Mitsubishi Electric successfully implemented Flash Injection Inverter technology allowing 100% heating performance at  $-15^{\circ}\text{C}$  and operations to  $-30^{\circ}\text{C}^*$  and beyond.
- Mitsubishi Electric Lossnay<sup>®</sup> core energy recovery ventilation technology has redefined the mindset of the HVAC industry, allowing efficient total energy recovery (sensible & latent) in extreme summer & winter outdoor ambient operating conditions across Canada.

<sup>†</sup>Requires ME windscreen for operation below  $-5^{\circ}\text{C}$

\*All version of models MXZ-4C36NAHZ, MXZ-5C42NAHZ, MXZ-8C48NAHZ. Includes tolerance. Units can operate down to  $-30^{\circ}\text{C}$  and beyond, depending on conditions.



**100%**  
heating  
performance  
down to **-25°C\***

## Sustainability At Our Core

Sustainability and respect for the environment is a core part of our foundation and one of Mitsubishi Electric's seven guiding principles. In Canada, Mr. Slim and City Multi Heating and Cooling technologies are leading the way towards a greener tomorrow, playing a pivotal role in the realization of elevated LEED Green Building performance benchmarks and both NET Zero and Zero Carbon thresholds. Through our Environmental Vision 2021, we aim to facilitate the creation of a low carbon economy through continued product innovation driven by continually improving energy efficiency.

## Going The Extra Kilometer And More

Mitsubishi Electric Heating and Cooling understands that delivering a quality product doesn't just end at a sale. We are dedicated to providing superior customer service – before and after the product is sold.

## Industry Leading Support

The Mitsubishi Electric Heating and Cooling team of factory trained professionals prides itself in providing industry best product technical support during the design, installation and final solution implementation phases of a project.

## Comprehensive Training

Whether it be the design engineer or the installing contractor, we provide extensive and graduated customer product training to put industry professionals in the position to do their jobs safely and efficiently and to ensure the successful implementation of product solutions regardless of location or application type.



**The Mitsubishi Electric VRF training program provided a great opportunity to see the Mitsubishi product line up close and gain insight into space and installation requirements!"**

— Andrew Lee, P.Eng, MBA, Innovia Corporation

## City Multi Training Programs

The City Multi Contractor Certification Program is an initiative to further enhance the technical competence of our current contractor base, strengthening their brand patronage and increasing sales.

## Diamond Designer Programs

The Diamond Designer Programs highlight the features and benefits of applying Mitsubishi Electric HVAC systems in different projects for Canadian markets. These workshops address common practices, design strategies relating to codes and standards, and the regional extreme of the Canadian climate in meeting design requirements while maximizing occupant comfort and system efficiency.

## Mitsubishi Electric Quality (MEQ)

Mitsubishi Electric Quality marks over 90 years of excellence in technology, design and manufacturing, representing the highest standards of comfort, durability and efficiency. Our quality assurance program is guided by our stringent Quality Policy, which ensures that all phases of the development process – from design and manufacture to the finished product – meets our standards.



# Welcome To A Better Solution

With Mitsubishi Electric Heating and Cooling, you'll always get the best tools for a successful project, because we deliver a total solution from equipment and design, to training and support, every time. For building developers or owners, our Variable Compressor Speed Inverter (VCSi) and VRF Technology will help maximize cost savings and increase occupant comfort. Architects, on the other hand, benefit from our flexible installation configurations and low-footprint systems to help bring their vision to life, without compromises. For engineers eager to achieve LEED certification, our energy efficient and sustainable design delivers minimal environmental impact. While contractors get a leg up with the installation-friendly design of our 2-pipe VRF system that streamlines the job, saving time and effort. **No matter what your needs or project requirements may be, we're ready with the solution.**

## For Building Owners & Developers

We empower developers and building owners to create the most comfortable, capable, and profitable buildings that reduce maintenance, maximize efficiency, and minimize service calls through the highest rated ductless and VRF support infrastructure in the industry. Our high efficiency, low-environmental-impact technology, will help you achieve LEED certification and long-term cost savings.

### Maximize Building Efficiency

- Easy to use controls system
- Integration with building controls
- Highly efficient equipment

### Supreme Thermal Comfort

- Zone-by-zone temperature control
- Remote monitoring and management

### Reduce Troubleshooting and Maintenance

- Onboard diagnostics capabilities
- Remote monitoring and management
- Advanced error and warning messages
- Online resources to research/diagnose problems



# For Architects

Unlike conventional HVAC systems that present design challenges with their bulky outdoor units and trunks of ductwork, Mitsubishi Electric HVAC systems protect the integrity of your design, so you can design based on your vision, not traditional HVAC system constraints.

## Design Friendly

- Design-friendly systems and software to minimize errors during design process.
- **Design Tool:** A layout and system selection tool for efficient and easy design assist support for all Mitsubishi Electric Heating and Cooling systems.

## Design Flexibility

- Flexibility in placement of indoor and outdoor units
- Software to minimize impact of design changes
- Variety of different components available to use

## Reduce Troubleshooting and Maintenance

- Easy to use controls system
- Easy to understand operation
- Superior reliability



# For Engineers

We help mechanical engineers maximize their billable hours by providing easy-to-design, and operationally efficient, HVAC systems that experience minimal after-installation issues through the highest rated ductless and VRF support infrastructure in the industry. With our high efficiency, low-environmental-impact technology, you'll achieve LEED certification with ease.

## Design Friendly

- Design-friendly systems and software to minimize errors during design process.
- **Design Tool:** A layout and system selection tool for efficient and easy design assist support for all Mitsubishi Electric Heating and Cooling systems.

## Maximize System Efficiency

- Easy to use controls system
- Integration with building controls
- Highly efficient equipment to achieve LEED certification

## Reduce Troubleshooting and Maintenance

- Easy to use controls system
- Easy to understand operation
- Superior reliability

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# For Contractors

We help mechanical contractors maximize their profitability by providing easy-to-install energy efficient HVAC systems that minimize service calls. And with the highest rated training and support infrastructure in the industry, you can feel confident recommending our products to your clients.

## Easy to Install. Easy to Recommend.

- Two-refrigerant pipe design vs. ductwork
- Simple field connections and minimal mechanical components
- Less material costs, no on-site surprises

## Minimize Troubleshooting and Maintenance

- Onboard diagnostics capabilities
- Remote monitoring and management
- Advanced error and warning messages
- Online resources to research/ diagnose problems
- Technical support escalations when necessary

## Comprehensive Training & Support Infrastructure

- Extensive and graduated customer product training
- City Multi Contractor Certification Program provides the tools and knowledge to help increase sales and overall expertise.
- Online resources to research/ diagnose problems; technical support escalations when necessary

## The Mitsubishi Electric Advantage

- 2-pipe VRF system requires less ceiling space, simplifying installation and reducing construction time
- BMS integration (Our Building Management & Control System)
- Industry leading SEER/EER/HSPF ratings
- Excellent efficiency at part-load conditions

# For Strategic Partners

We offer national support and customized benefits for our Strategic Partners, servicing a broad range of our HVAC solutions and products to fulfill your unique business needs. We work with you to help determine the best solutions and services for your projects to help you achieve your HVAC business goals. Feel confident knowing Mitsubishi Electric is there for you, across the country.

## Total HVAC solutions partner

Beyond heating and cooling, we also offer ventilation solutions that can help improve IAQ while achieving energy savings at the same time. With our controls line-up, you can achieve flexibility and comfort for your occupants

## Preferred Pricing

Receive savings on HVAC equipment and controls, with special considerations for any future new buildings, or on any expansions or retrofits to an existing site

## Custom Training

We offer comprehensive product training tailored to meet the special requirements of a specific building to ensure our partners' teams have a clear understanding their Mitsubishi Electric system

## Extensive Industry Experience

We provide HVAC solutions for hotels, condominiums, stores, institutional, office buildings, industrial and many more

## National Support Capabilities

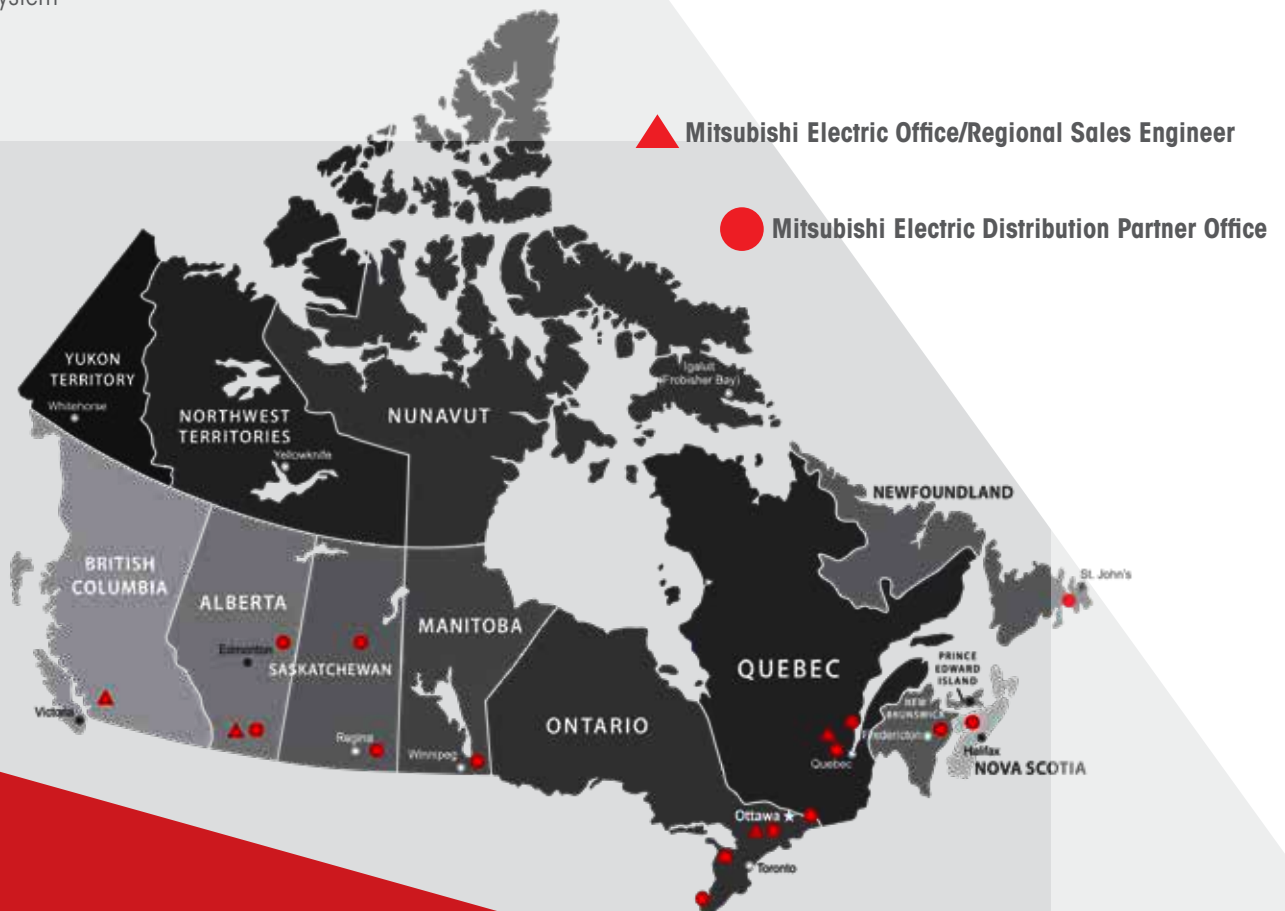
We have a widespread experienced staff support all across Canada to assist you when you need it

## Intuitive, Energy-Efficient Systems

Our systems provide high energy performance capabilities and requiring minimum service

## Tailored Solutions

Receive the best solution for your precise needs with our different control options





# Sifton Centre

London, ON

Sifton Centre is located in London, Ontario and is the cornerstone of Sifton Properties 'West 5' project that will include residential apartment buildings, townhomes, a retirement home, grocery store and medical offices. In total, there will be approximately 2000 residential units and 250,000 to 300,000 square feet of commercial construction. The entire master-planned community is projected to take about 10 years to complete.

## The Challenge

As the first building in the community and the developer's main space, the Sifton Centre needed to model everything the community was going to be – innovative, technologically advanced and energy-efficient. With net-zero energy consumption as the goal, every aspect of the design was carefully considered, from solar panels to LED lighting to ultra-tight insulation. For the heating and cooling system, Neil Carter, Director of Commercial Construction at Sifton, explains that energy-efficiency, cost-effectiveness and the best payback period were the key considerations.

## The Solution

Sifton Properties worked with Smith and Andersen Ltd., an engineering consulting firm, to conduct energy modelling to determine the most efficient and cost-effective HVAC system. The results of the energy modelling revealed that an electric air-source variable refrigerant flow (VRF) system was the best option. After accepting three bids, Sifton selected Mitsubishi Electric's City Multi Air Source system, as it met all their criteria the best.

## The Results

After using their new office space for three years, Sifton Properties is incredibly pleased with their HVAC system. Carter reports that year-round, including throughout winter's below-freezing temperatures and summer heat waves, everyone is quite comfortable in the building.

Even -20°C temperatures are no match for the fan coil and condensing units, which are able to completely provide all

the heat required throughout the building. In terms of energy efficiency, Carter confirms the system is extremely efficient, "exactly as we modelled it."

In fact, the system performs exceptionally well with the building's other net-zero construction features that the building actually produces more energy than it consumes (is net positive) - Sifton even receives a credit on their monthly utility bills.

**"The Mitsubishi Electric system is the most cost-effective and energy-efficient solution you could put into a building of this size."**

*-Neil Carter, Director of Commercial Construction, Sifton Properties*



## Stratus

45 floors  
364 suites

## Altus

55 floors, 550 ft. tall,  
20 floors commercial office  
including Whole Foods Store,  
34 floors residential  
with 280 suites,  
Club 55 on top floor.

## Cirrus

328 suites,  
construction 2018

## Solo District

Burnaby, BC

### Energy Savings From The Ground Up

SOLO District is one of the largest master planned mixed use communities in Lower Mainland Vancouver and features four iconic residential towers boasting 1,400 new homes with spectacular views, great shops and services, and a modern twelve storey office tower. It stands tall as an excellent example of what can be accomplished by incorporating energy-saving measures from the ground up.

- Sustainable & Energy Efficient - equivalent LEED® Gold with features such as a state-of-the-art geo-exchange system
- Water-source City Multi VRF Heat Recovery System  
575V installed floor by floor
- 2600 tons total nominal capacity, 570 – 800 Tons per building

### Energy Savings to Power 105 Single-Family Homes For A Year

For Phase 1 of SOLO District project, the energy-modeling study predicts energy savings of just over **1.16 million kilowatt hours per year** over a similar building without the same energy-saving measures. That's enough to power more than 105 single-family homes in B.C. for a year.

Energy Saving Measures Built Into Stratus and Altus Include:

- Increased roof and wall insulation
- High-efficiency window glazing
- Interior and exterior lighting controls
- A variable refrigerant flow (VRF) system

“For the bigger office tenants, energy efficiency is key. Government, for example, is required to look for offices that reach the equivalent of at least LEED Gold.”

– Jim Bosa, President, Appia Developments

Predicted energy savings of just over

**1.16 million\***  
kWh/year saved

\* As predicted by [www.bcbusiness.ca/bosa-goes-big-on-energy-efficiency-with-burnaby-tower-at-solo-district](http://www.bcbusiness.ca/bosa-goes-big-on-energy-efficiency-with-burnaby-tower-at-solo-district)

# Westman Village

Calgary, AB

## *The Largest Operational Multi-Unit Residential Development Using P-Series Products in North America*

Westman Village is a new development by Jayman BUILT located in the community of Mahogany in Calgary, Alberta. Redefining the way new homes are built, bought and lived in, the carefully designed community includes condominiums, townhomes, seniors' residences and long-term leasing condos.

### The Challenge

As many of the prospective new residents and homeowners would be downsizing, the units needed to be quiet and the building had to create a seamless transition with top-quality products that would meet high expectations. This includes everything from the finishes to the heating and air conditioning units. The heating and cooling units also had to be energy efficient, as Jayman BUILT prides itself on green construction, being the first builder in Alberta to have solar panels as standard on all their new homes.



**The Cadillac of heating and cooling units.”**

*– Dennis Aucoin, Senior Development Manager/Senior Project Manager, Westman Village, Jayman BUILT*



## The Solution

Mitsubishi Electric's individual split and centralized VRF systems were chosen thanks to their efficiency, reputation and ease of maintenance. Their whisper-quiet sound was also a deciding factor, as the units emit about half the noise of a regular unit in a house. The slim, suitcase-style units were perfect for more compact living spaces.

Furthermore, the Mitsubishi Electric units are all about consumer comfort and use unique design and engineering solutions to deliver it. Typically, a normal air conditioner runs on full blast, cooling the entire space then shutting off. But these units are built to get to a certain temperature and maintain it, which allows for lower energy use and improved comfort.

## The Results

Delivering energy efficiency while maintaining reliable, whisper quiet heating and cooling, reviews of the Mitsubishi Electric solutions have been highly positive, with the unique community development garnering media attention, including in the Calgary Herald.

**"We wanted a product that was going to be somewhat maintenance free and last the test of time. From what we've heard, these units hold up. We did our research."**

*— Dennis Aucoin, Senior Development Manager/Senior Project Manager, Westman Village, Jayman BUILT*



# evolv1

Waterloo, ON

Built in 2018, the evolv1 office building in Waterloo, Ontario, is a green project leading the way in energy conservation. As the first office building to receive the Zero Carbon Building-Design Certification from the Canada Green Building Council, evolv1 is a landmark project for developer and owner, The Cora Group, who collaborated with Sustainable Waterloo Region, the David Johnston Research + Technology Park and anchor tenant EY to envision the building.

## The Challenge

evolv1 was designed to not just maximize energy efficiency, but to create more energy than it consumes. As part of this mandate, all components needed to be energy-efficient, including the HVAC system.

## The Solution

Since the CaGBC standards for a Zero Carbon certification specifically mention the HVAC system, Mitsubishi Electric's energy-efficient heating and cooling systems were a natural fit. Mitsubishi Electric's City Multi Water-Source VRF Heat Recovery System was chosen because it not only regulates the flow of refrigerant to the fan coils, but it also changes the water flow rate to minimize the pumping energy. The Mitsubishi Electric heat pump system is also whisper-quiet, and is a great solution for office, commercial, education and residential applications.

It is the most efficient way of heating the building – the source of the heat is warmer because you have a geothermal system pulling heat from the ground instead of air, which is cooler and needs more energy to move the same amount.

## The Results

evolv1 attained its Zero Carbon Building-Design certification from CaGBC and has become a model for future developments. MacDonald points out that zero carbon buildings are known to have energy, operational and maintenance costs savings. They also have a lower unoccupancy rate and more productivity, as the human experience is improved. In fact, MacDonald says the upfront capital costs add only between 4% and 10% to the total, but lifecycle costs over 25 years come out neutral or under. This means the upfront investment completely pays for itself or ends up making money.

**"Mitsubishi Electric Heating and Cooling products were selected right from the get-go during the design phase."**

*– Syed Abid, Sales Manager, HVAC Division of Mitsubishi Electric Sales Canada Inc.*



**Our original vision was to design and build a building that was net positive energy at similar costs to conventional construction – and we were determined to prove it was possible.**

*– Adrian Conrad, Chief Operating Officer, The Cora Group*

evolv1

# Le Sommet 3V Condominium

Québec City, QC

Le Sommet 3V condominium is located at the entrance of Quebec City near two main bridges and Laval University. Newly built in 2018, the 14-storey condo was designed with innovative and sustainable green living in mind.

## The Challenge

To attract future residents and investment buyers at the purchasing stage, developer Marc Lachance wanted to create a high-quality condo building with well-equipped units. To achieve this, he included design features such as glass facades and luxurious interior finishes, as well as resort-like amenities that include a pool, rooftop terraces and Tesla electric car-sharing services. It was important that everything in each unit was of superior quality and performance, including the air conditioning units.

## The Solution

Working with Enertrak, the exclusive distributor for Quebec and Atlantic Canada of Mitsubishi Electric Sales Canada Inc., Mr. Lachance decided on Mitsubishi Electric air conditioning units for his project. Prioritizing the end-user experience, Enertrak was pleased with the units' reliability and Mitsubishi Electric's technical service and parts availability, offering peace of mind should anything go wrong. In addition, the low noise level of the units and the minimal space required to install the indoor unit were also attractive features. From an economical perspective, the pipe size of 1/4 and 3/8 also helped save money during the installation process.

## The Results

Mitsubishi Electric's Mr. Slim single-split units were able to meet the specifications and the needs of the customer. This included installing the indoor unit above the pantry door, as well as the option to choose an air conditioning-only system. With the Mitsubishi Electric air conditioning models, residents of Le Sommet 3V now enjoy more living space, low noise disruption and high-quality, high-performing energy-efficient air conditioning.



“

**Building apartments with small air conditioning units that make low noise is very important for condo owners.”**

– Steve Fortin, Engineer for EBC Inc. and Representative of Marc Lachance



# Wyndham Garden Airport Hotel

Calgary, AB

Featuring breathtaking views of the Rocky Mountains and the Calgary city landscape, the Wyndham Garden Calgary Airport is a new full-service addition to Calgary's tourism and hospitality industry. While the hotel's 3 km proximity to the airport is convenient for guests, it brings forth an unexpected design and engineering challenge — airplane noise reduction.

## A Sound Challenge

Nick Karas, the hotel's owner, wanted to ensure his guests experience a peaceful stay and a good night's rest, not noise issues that result in guest complaints and negative online reviews. One of the main concerns was the air conditioning and heating units for the rooms. Traditional Packaged Terminal Air Conditioners (PTACs) are window units that are placed in the wall and have a direct vent outside, bringing in outdoor noise from planes passing by.



“

**It makes the room really quiet, which is best for the hotel's guests.”**

– Terry Tsan, Certified Engineering Technologist

### The Quiet Solution

Terry Tsan, the Certified Engineering Technologist working on the project, recommended the Mitsubishi Electric Wall-Mount indoor units that don't have any vents or other components that extend outdoors. Instead of a vent facing outside, piping connects the units to exterior rooftop units to provide cooling. As a bonus, the units are very quiet when running and offer longer-term operational cost-savings.

### No Noise. No Complaints.

After three years operating wall-mount indoor units from Mitsubishi Electric, building owner, Nick Karas, is pleased to report that there have been no noise complaints from the guests. He views this engineering, design and construction decision as an investment made in the overall guest experience and ultimate satisfaction with their stay.

**“This solution provided the most energy-efficient technology compared to other traditional hotel concepts, like PTACs,”**

*— Johnny Ho, Technical Sales Representative at Klass Mechanical*



# Trinity Glen

Newmarket, ON

**Minimum Consumption. Maximum Savings.**

## Challenge

Trinity Glen is a co-operative housing complex located in the town of Newmarket, Ontario. Built in the late 1980s, its original heating source was electric baseboard heating, which can be very costly. Trinity Glen needed a modern, energy-efficient heating solution that would be easy for residents to use daily and cost-effective to run and install.

## Energy Saving Solution

After three companies submitted proposals, Canco ClimateCare came back with the best bid using Mitsubishi Electric products, including Zuba-Multi heat pumps that provide up to 80% of their rated capacity at -25°C, meaning residents would have little or no reason to turn on their baseboard heating, saving money from day one.

## Individually metered. Seamlessly installed.

Not only do the new Mitsubishi Electric units blend seamlessly into the sightlines of the building, each system is individually metered, allowing for further savings versus the previous baseboard system. Still, the key benefit of the new install and heating system is the everyday savings it will bring to residents.

**“The results were amazing, and even exceeded expectations in savings on the heating side with a 50% reduction on average, varying slightly depending on family size.”**

– Bob McKeraghan, President of Canco ClimateCare

**“We became very innovative to create some savings. The selected product was the Mitsubishi Electric Zuba-Multi system, a solution that provided efficient heating and air conditioning, which the homes never had before. Plus, Mitsubishi Electric products have a life cycle of over 20 years with minimal maintenance.”**

– Bob McKeraghan, President of Canco ClimateCare

**“Mitsubishi was chosen because the system performed the best at low temperatures efficiently generating a high amount of heat in temperatures as low as -27°C.”**

– Tom Melanson, of Mits Airconditioning Inc.

**“Mitsubishi has such a good track record with reliability and performance, so I would have to be prided away to go somewhere else.”**

– Bob McKeraghan, Contractor Canco ClimateCare

**“Exceeded expectations in savings on the heating side with a 50% reduction on average.”**

– Bob McKeraghan, President of Canco ClimateCare





# Rogers Place

Edmonton, AB

## World-Class Cooling Equipment for a World-Class Arena

### The Challenge

Rogers Place is a newly built indoor multi-use arena in Edmonton, Alberta and the home of the NHL© Edmonton Oilers. Owned by the City of Edmonton, the large-scale, high-profile project took over two years to build and cost over \$590 million. There were several stakeholders in its construction, including the close gaze of the public. As such, **the project demanded close attention to detail, and suppliers who could meet escalated timelines and provide energy-efficient products that could achieve LEED Silver standards.**

### The Solution

Sercon Refrigeration selected Mitsubishi Electric's VRF (variable refrigerant flow) systems for the project. Rather than alternating between 'on' and 'off' like traditional air conditioning systems, the Mitsubishi Electric models used for the Rogers Place arena never turn off completely. Instead, they are always running in the background, adjusting the compressor speed in real time. The result is a more comfortable indoor environment and improved energy efficiency. Less power is used because the system is only cooling to maintain, rather than achieve, the desired temperature.

In addition, Mitsubishi Electric equipment was chosen as the preferred equipment to cool all the mechanical, server, and electrical rooms that serve as power feeds for basic electrical requirements throughout the building such as lighting and power outlets. As there are quite a number of these rooms, the ductless split solution was the best fit due to the flexibility of its multiple configurations, which allowed for easier installation than alternative solutions.

### The Results

The Mitsubishi Electric system has been working smoothly and efficiently since 2015 and Rogers Place has received numerous accolades, including being named one of the best stadiums of 2016 by Sports Management and receiving the Engineering News-Record Global Best Projects – Award of Merit, Sports/Entertainment. It has also triggered a boost in tourism and hospitality and is the main attraction of the Ice District – a mixed-use sports and entertainment district being developed around the arena.



“

**It's nothing short  
of phenomenal...”**

– Steve Van Maanen, Mechanical Designer and Contract Administrator

# Victoria Common Condominium

*Kitchener-Waterloo, ON*

The Kitchener-Waterloo region in Ontario is an up-and-coming area for homeowners and investors looking to purchase property without the sky-high prices of Toronto. With many new-build houses and condos planned and on the market, new residential developments need to stand out to compete. One of these communities is Victoria Common, by Queensgate Developments (Kitchener) Inc. When complete, it will include five mid-rise condo buildings with over 990 residential suites. To remain competitive, the condos are contemporary in design with a brick, steel and glass façade. All units include patios, balconies or terraces.

## The Challenge

To make their development stand out in such a competitive environment, Queensgate aspired to build a single geothermal system that would work for all five buildings to provide better energy efficiency and redundancy, ensuring that no one building could ever be without heating or cooling. Sam DeCaria, President of Anew Building Corp., explains that energy-and cost-savings for the developer and for end-users was essential and thus the option of using a geothermal district energy system, which offers 30% energy-savings when compared to other systems, was very attractive. In order to fulfill their vision, Queensgate needed a high-efficiency HVAC system that could connect to the geothermal system and reliably carry heating and cooling to each suite with the highest level of comfort and control.





## The Solution

Mitsubishi Electric Heating and Cooling stepped in with City Multi VRF (Variable Refrigerant Flow) Water-Source Heat Recovery systems, a solution that would allow Victoria Common buildings to use a geothermal district energy system without having to install a huge infrastructure before all the buildings are built. They suggested constructing each building on independent geothermal bore-fields, with multiple modular water-source VRF systems that provide redundancy, high energy efficiency and individual suite as well as whole-building digital controls. The VRF systems recover energy from zones on each floor of a building before drawing energy from the geothermal field. This means it can draw heat from a part of the building that needs cooling and transfer it to an area that needs heating.

There were other benefits to this solution, too. Unlike traditional systems, Mitsubishi Electric's Water-Source VRF Heat Recovery Systems didn't require water pipes or pumps throughout the building, which can lead to leaks and headaches for the developer, property management and residents. There are no compressors in occupied suites, so the system operates at very low sound levels, almost a whisper, even during the summer cooling season. The individually metered systems offer residents the convenience and flexibility of operating heating or cooling year-round, which is perfect for older residents who might want heat in the summer or people who run hot and need a cooler temperature to sleep well.

Mark Zwicker, Principal at Architecture Unfolded and Victoria Common architect, also appreciated the design flexibility of the in-suite air distribution units, as they were smaller and offered more placement options, meaning they are hidden in the ceiling freeing up additional floor and living space and not obstructing windows.

## The Results

Everyone involved with the project was very pleased with the results. Mitsubishi Electric met budget constraints and worked with a third-party energy provider to provide individual suite monitoring and measuring for billing purposes. Trained contractors, factory oversight and their 10-year warranty ensured quality installation and the reliability the client required. Since geothermal energy is a newer technology, everyone involved was extremely appreciative of the experience and extra support provided by Mitsubishi Electric to ensure the project was a success.



**Variable refrigerant flow and geothermal energy are not the norms – there's a lot at stake if it doesn't work. There's a big learning curve, the system has to work for all parties, and it takes time to find a comfort level. The Mitsubishi Electric brand was huge in giving us the confidence to use this technology because they're a proven, reputable brand and company."**

*— Sam DeCaria, President of Anew Building Corp.,  
a partner of Queensgate Developments (Kitchener) Inc.*



# Bruce County Web

*Kincardine, ON*

## The Challenge

The Bruce County Housing Co-op is a government-owned social housing complex made up of sixteen similar townhouses, most of which were still using the original, inefficient electric furnaces that were installed in the 1980s. When the complex received a government grant to improve their infrastructure, they knew upgrading their heating would be a smart investment. Since AC would be an additional expense to the tenant, it was essential that the system be efficient in both heating and cooling. Other key factors to consider were a low initial capital cost, operating system cost, as well as a quick and simple retrofit.

## The Solution

DEI & Associates Inc. specified Mitsubishi Electric's Zuba Central heat pumps because the equipment met every one of the client's requirements. Performing best at low temperatures, it provides 80% of its rated heat at -25°C\*, meaning it operates superior to other central heat pumps. Thanks to this much heat being generated efficiently at low temperatures, the inefficient backup electric heaters will rarely be used, if at all.

## The Results

Retrofit times were very quick, with each heat pump taking only one day to install. This helped keep initial capital costs in check and minimized disruption and inconvenience for the tenants. Since the installation was approximately 18 months ago and a larger time period is needed to gauge the long-term results, limited data is available.

**"The existence of ductwork, combined with the costly electric furnace systems, made the Mitsubishi Electric Zuba Central Heat Pumps an attractive option."**

*—Tom Melanson, Territory Manager, Mits AirConditioning Inc.*

**Hydro bills were  
decreased by more than**

**50%**

*— Tony Ban, Housing Facilities Manager for the Corporation of the County of Bruce*

\*Models MXZ-4C36NAHZ, MXZ-5C42NAHZ, MXZ-8C48NAHZ. Includes tolerance. Units can operate down to -30°C and beyond, depending on conditions.

# Place de l'Escarpement

Québec City, QC

Located in a new commercial development near the major freeways of Québec City, Place de L'Escarpement is new A-class office building. All 145,000 square feet of its office space has been leased and is now occupied. This exceptional real estate complex borders the Parc de l'Escarpement and the Éco-promenade des Rivières.

## The Challenge

In Canada and around the world, LEED is a proven and holistic path to addressing climate change, and to create buildings that are more resource-efficient, healthy and resilient. Addressing the new landscape of environmentally friendly developments, the designers of Place de L'Escarpement wanted to achieve a LEED GOLD certification. To achieve these high expectations, the developer needed a reliable HVAC system that would optimize energy efficiency while providing their occupants advanced control over thermal comfort.

## The Solution

By installing capacities of nearly 4 million Btu/h of City Multi Water-Source systems, the building now serves simultaneous heating and cooling using geothermal energy over its 148,000 sq. ft. of floor space.

## The Results

From a combination of geothermal, heat recovery and lighting fixtures, this office building is designed to reduce energy consumption by more than 55 percent compared to the reference model building based on CMNEB standards. The amount of energy saved annually will be able to provide electricity to 110 standard single-family homes each year. Place de L'Escarpement is currently the largest geothermal installation in Quebec City and is also one of the top 10 most efficient buildings in its class in Canada.

**"Our original vision was to design and build a building that was net positive energy at similar costs to conventional construction – and we were determined to prove it was possible."**

*–Adrian Conrad, Chief Operating Officer, The Cora Group*



## Modello

*Burnaby, BC*

The MODELLO stands tall as a beacon for luxury living in Burnaby's Central Park Community in British Columbia. This stunning 37-storey residential building is equipped with the Mitsubishi Electric City Multi VRF system to provide a cutting-edge combination of efficient heating and cooling, energy recovery, and ventilation for its 1, 2, and 3 bedroom suites. Powered by a state-of-the-art geothermal loop, residents enjoy the perfect temperature all year round and the benefits of individual thermal metering for utility cost control.

**“We saw an opportunity to create something that was very elegant, and had the quality and excitement of a five-star hotel.”**

*– Chris Dikeakos, founding and Managing Principal at Chris Dikeakos Architects, Inc.*



## Design Without Compromise

Without the restraints of conventional HVAC systems that present design challenges with their bulky outdoor units and trunks of ductwork, the elegant and dynamic vision for Modello was fully realized. Modello's bedrooms are bright and generously sized, with a streamlined design that makes the most of the space, while also delivering state-of-the-art heating, cooling, and ventilation.



**The building was designed from the core out. By doing so, we have created floor plans with no wasted space. Every square foot is being used to the max.”**

*– Ben Amzaleg of Magnum Projects*

### City Multi Geothermal Water-source VRF Heat Recovery System

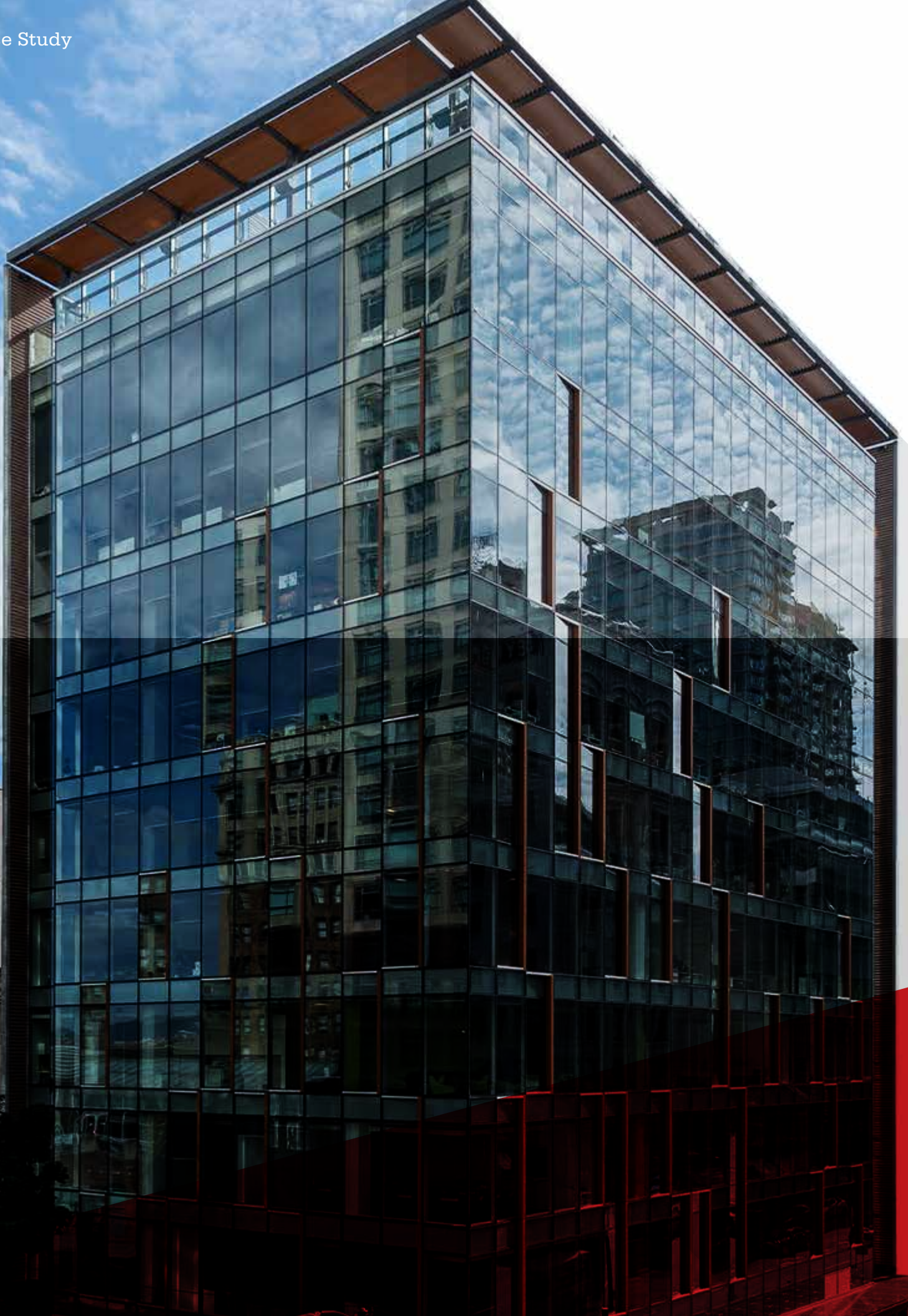
List of Equipment:

- 28 Energy Recovery Ventilators (LGH-F-RX5-E1)
- 42 VRF Systems
- 41 Water-source condensing units with heat recovery (PQRY-P-SKMU-A)
- 41 Branch Controllers (CMB-P-NU-GA)
- 316 Fan coil units (PEFY-P-NMAU-E3)
- 460 wall mounted controllers (PARU01MEDU-J)
- 3 AG-150A Central Controllers with expansion modules

### Geothermal/VRF Heating and Cooling

State-of-the-art geothermal heating and cooling provides the perfect temperature all year round with individual thermal metering of each home's heating and cooling for utility cost control.

- 125 tons, 128 boreholes, 225 ft. deep, 15 ft. ctrs.
- 28,800 ft. total geo-exchange pipe length
- Geotility completed the drilling and tie-ins prior to the construction start of the tower
- 8 boreholes per circuit, 8 circuits per vault, 2 vaults



# 510 Seymour

Vancouver, BC

Nestled in one of the fastest-growing areas of downtown Vancouver, 510 Seymour is a boutique, multi-use office, retail and educational building that was completed in 2016. The commercial building is part of the eastward shift of the Vancouver business district and is conveniently located close to Simon Fraser University, the British Columbia Institute of Technology, the Skytrain, public amenities and shopping.

## The Challenge

Serracan Properties, the developer of the project, was searching for a cost-effective heating and cooling solution for the small, 10-storey building. The system needed to accommodate high ceilings and have features and functionality that fit with the classy space, including low noise that wouldn't disrupt the acoustics.

## The Solution

After exploring different mechanical systems and options for heating and cooling, Serracan Properties decided on the Mitsubishi Electric City Multi Air Source Heat Pump System. The cost-effective solution was ideal for this project because it allows for individual monitoring and billing of energy consumption by floor. This means that the landlord can bill each tenant separately, which is an attractive feature for tenants who want to control their energy costs.

Another important factor was the energy efficiency of the Mitsubishi Electric system. Adler University, one of the main tenants, is LEED Gold certified. In order to maintain the certification, the heating and cooling system it uses needs to meet the LEED standards, which the Mitsubishi Electric system does.

## The Results

The 510 Seymour project was completed successfully and is now a part of Vancouver's vibrant downtown community. In addition to Adler University's Vancouver campus, tenants include a restaurant, retail shops and a rooftop event space complete with a weather-protected barbecue area.



**The Mitsubishi Electric system [has] the ability to have energy billed floor per floor. Multiple tenants can be billed separately for a fairer distribution of energy costs.”**

—JS Tessier, Principal Engineer, Integral Group



# Testimonials

At Mitsubishi Electric, we stand by our products. And so do the experts. Here's what industry professionals are saying about us.

“For the bigger office tenants, energy efficiency is key. Engineering firms want that level of sustainability and the lower operating costs they get with good energy efficiency as do many residential owners and tenants today.”

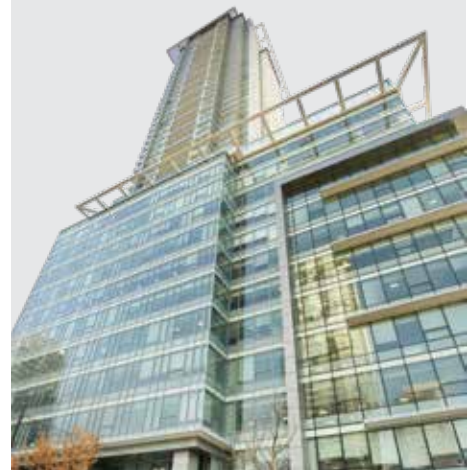
— Jim Bosa, President Appia Developments

“A Mitsubishi Electric VRF system can provide the ultimate in energy conservation. The energy-modeling study showed that the VRF alone will help Stratus save over one million kilowatt hours of energy over a year versus a conventional HVAC system.”

— Bojan Andjelkovic, BC Hydro Specialist Engineer

## SOLO District

SOLO District is one of the largest master planned mixed-use communities in Lower Mainland Vancouver and features four iconic residential towers boasting 1,400 new homes. It stands tall as an excellent example of what can be accomplished by incorporating energy-saving measures from the ground up.



## Westman Village

Westman Village is a new development by Jayman BUILT located in the community of Mahogany in Calgary, Alberta. As many of the prospective new residents and homeowners would be downsizing, the units needed to be quiet and the building had to create a seamless transition with top-quality products that would meet high expectations.

“We were attracted to the Mitsubishi Electric brand because we consider it the Cadillac of heating and cooling units.”

— Dennis Aucoin, Senior Development Manager/  
Senior Project Manager, Westman Village, Jayman BUILT

“It's great that [the developer] understands the importance of energy efficiency and putting more emphasis on the comfort of their customer, leading the way in the industry. They bought a very premium [Mitsubishi Electric] product and they are doing their customers a great service.”

— Mark Diaz, Project Manager and Technical Sales Representative



# Rogers Place

Rogers Place is a newly built indoor multi-use arena in Edmonton, Alberta. The project demanded close attention to detail, and suppliers who could meet escalated timelines and provide energy-efficient products that could achieve LEED Silver certification.



We've always liked Mitsubishi Electric equipment and it's always been high end. So on a project like this we didn't want to gamble on a manufacturer. It's worked out great."

— Cory Somers, Managing Director, Sercon Refrigeration

"We have essential equipment within our electrical room, and temperature control is the primary concern. We needed to ensure that the electrical equipment does not overheat."

— Jason Rimmer, Director, Engineering and Ice Operations for Rogers Place



[Mitsubishi Electric] has done a great job to ensure that any heritage restrictions were met while bringing the facilities up to modern standards."

— Chris Wick, Regional Manager of Camps, YMCA of Western Ontario

"If it was up to me, everything would be Mitsubishi. . . I've never had an issue."

— Steve Veal, President, Shamrock Mechanical Solutions

# London School

This heritage building in the Wortley Village neighbourhood of London, Ontario is a mixture of Classical, Romanesque and Gothic revival architecture. When the City of London bought the building and land in 2014 with plans to restore it to house the YMCA of Western Ontario, they faced a unique challenge – completely overhaul the interior with minimal disruption to the building's heritage status.



## Canadian Expertise Paired With Global Innovation – Get It Working For You.

For over 40 years, Mitsubishi Electric Sales Canada Inc. has been serving the Canadian market, meeting the specific needs of contractors, design-engineering firms, architects, and building owners in the uniquely demanding Canadian climate.

From LEED compliant energy efficiency to flexible installation configurations, no matter what your needs may be, Mitsubishi Electric Sales Canada has a product and a solution for you.

