# 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 support, to product training and associated after sales support, every time. Mitsubishi Electric's VRF system requires a smaller building footprint, less piping, less connection points and less maintenance. This makes this technology platform an ideal choice not only for new buildings, but also for retrofit projects. For design engineers engaged in green building applications, our energy efficient and sustainable technology delivers minimal environmental impact. **No matter what your needs or project requirements may be, we're ready with the solution.** 





# One Company, One Completely Efficient Solution

With Mitsubishi Electric Heating and Cooling, you get a total solution from equipment and design, to training and support. We deliver the best tools for a successful project, every time.

#### High Efficiency Ratings. Low Energy Costs.

Energy efficiency is about being smart, and our INVERTER driven compressor technology is as smart as it gets. It uses the absolute minimum energy necessary to maintain personalized comfort levels while adjusting to part-load conditions, which occur most of the time. Combined with our modern sensing technologies for temperature, humidity, and occupancy, it's no wonder our energy efficiency regularly achieves LEED certification and high SEER, EER, and HSPF ratings.

#### **Easy To Design Systems**

With design-friendly software like Design Tool that identifies application errors while the system is being designed, you'll spend less time laying out your HVAC system, and more time maximizing the design benefits for occupants.

#### The Proof Is In The Performance

Our software lets you run energy simulation tests prior to installation, set goals, and measure against those goals after installation (i.e. performance contracting).

### Minimize Troubleshooting and Maintenance

Our HVAC systems are highly reliable and regularly installed at or under budget. With remote monitoring and management and a large service and support network, if problems do arise, you'll identify them quickly and resolve them efficiently.

- Easy to use controls system
- Easy to understand operation
- · Highly reliable



## **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

That's enough to power more than 105 single-family homes in B.C. for a year.

\*www.bcbusiness.ca/bosa-goes-big-on-energy-efficiency-with-burnaby-tower-at-solo-district

# 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.

#### 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

