

"The Yanmar gas-driven heat pumps were ideal when it came time to add air-conditioning to our busy restaurant. They only require single-phase power to operate and use significantly less electricity than any other electrical heat pumps! Using natural-gas our operating costs is also much less and we understand that by using renewable natural gas, they would easily be carbon-neutral."



# **PROJECT OVERVIEW**

Earls Fir Street Restaurant in Vancouver is a member of the Earls Restaurant Group, which was founded more than 30 years ago by a father and son team. This restaurant worked with Yanmar's dealer LSM Energy Solutions (Div. of Lee's Sheet

Metal), to install a pair of Yanmar 12-ton natural gas-powered Variable Refrigerant Flow (VRF) outdoor units on the roof along with interior ducted round flow and wall mounted indoor units for heating and cooling.

### **REASON FOR CHOOSING YANMAR**

As a restaurant, guest comfort while dining is of high importance, but equally important is worker comfort in a hot kitchen environment. Having air conditioning allows for better productivity and less worker fatigue.

When it came time to select a new HVAC system for the restaurant, the customer found out they would have to upgrade the power connection service, which was very expensive and would take a significant amount of time. LSM Energy Solutions, the local Yanmar dealer, presented Yanmar's natural gas-powered system as an alternative; this system reduced power consumption by 90 percent for the same tonnage of

heating and cooling, which allowed the customer to avoid costly electrical infrastructure upgrades and installation delays (including upgrades from the local utility provider).

Since Yanmar's system is VRF, the customer was able to select multiple indoor unit types to best serve the building's needs, as well as create multiple zones for maximum comfort.

Additionally, Vancouver can get very cold during the winter months, and Yanmar's system is effortlessly able to provide heat even in freezing cold temperatures due to engine heat recovery technology built in.

### ABOUT YANMAR AMERICA ENERGY SYSTEMS

Yanmar America Energy Systems is the North, Central and South American headquarters for the company's Variable Refrigerant Flow and Combined Heat and Power systems. Yanmar Energy Systems Canada is located in

Hamilton, Ontario, and supports variable refrigerant flow and combined heat and power systems sales and service for Canadian customers. Our team and products are focused on sustainability, reliability, and efficiency.







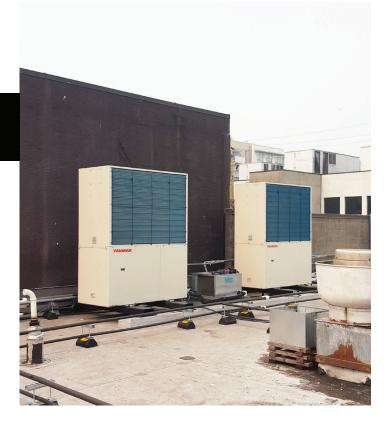
# EARLS FIR STREET RESTAURANT VANCOUVER, BRITISH COLUMBIA

## **QUICK FACTS**

APPLICATION: Restaurant
LOCATION: Vancouver, BC
COMMISSIONING DATE: August 2018
PRODUCT INSTALLED: NNCP144J x 2

#### **OVERVIEW**

Reduced operation costs Reduced installation costs Zone control Efficient heating capability



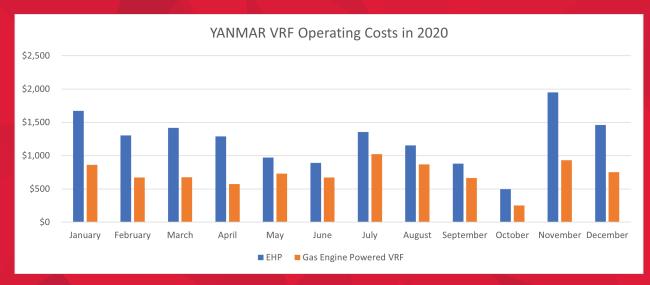
### **RESULTS**

By installing a pair of whisper-quiet Yanmar 12-ton (cooling capacity) natural gas-powered Variable Refrigerant Flow (VRF) outdoor units, Earls Fir Street Restaurant was able to reduce operation and installation costs from an electric-based system.

By using natural gas as an energy source, the building produces lower amounts of harmful emissions than traditional heating and cooling equipment. Earls Fir Street Restaurant now enjoys more control over guest comfort with zone control and

efficient heating and air conditioning.

The restaurant was able to avoid costly electrical system upgrades by switching to Yanmar VRF units.



Operating costs data is a calculated estimate based only on remote monitoring data and local average utility costs or bills.



