

BLUEPRINT

KEHOE EQUIPMENT LTD. OFFICE RETROFIT EDMONTON, ALBERTA, CANADA

PROJECT INFORMATION

Building Type: Office
Floors: 1 Main and 1 Mezzanine
Square Feet: 11,000 sq. ft.
Engineer/Architect/Contractor:
Kehoe Equipment LTD
Edmonton, Alberta, Canada



Challenge:

Kehoe Equipment LTD was relocating into an older, poorly conditioned and poorly insulated 11,000 sq. ft. commercial space that previously housed two tenants. The new, upgraded layout would provide a 6,400 sq. ft. office, a 2,000 sq. ft. mezzanine with server room and a 2,600 sq. ft. warehouse. The existing split ducted HVAC system was outdated, unreliable, did not provide adequate zoning and the outdoor units were prone to vandalism.

The Solution:

A VRV III air-cooled heat recovery system was chosen. A small damper controlled mechanical room was designed and built inside the building to house the condensing units. An assortment of different styles of indoor fan coil units were used to create 9 separate zones with 25 fan coils.

As part of the new tenant agreement, Kehoe Equipment LTD was responsible for upgrading the entire HVAC system. The existing system consisted of 7 outside condensing units with 7 indoor furnaces, a ceiling mounted water cooled heat pump and a ceiling hung furnace for the warehouse. It was decided to replace all existing equipment with a single VRV heat recovery system that would include 9 zones and 25 fan coils. A 20-ton system, made up of two 10-ton VRV modules, were housed in a small mechanical room equipped with dampers to automatically control the ambient air entering the units. Dampers optimally controlled either outside ambient air or inside heated air from the adjacent warehouse into the VRV

condensing units. The adjacent warehouse was fitted with two ceiling hung unit heaters to keep the warehouse warm during the cold winter and also provide tempered air for the VRV condensing units.

This simple, cold climate VRV system design, combined with cost effective commercial unit heaters, provides a simple solution for housing VRV condensing units within a compact, indoor mechanical room enclosure. Additional advantages of the indoor mechanical room included elimination of vandalism and theft, additional outside space and building appearance, longevity and better performance of equipment that is not exposed to extreme outdoor temperatures and weather.



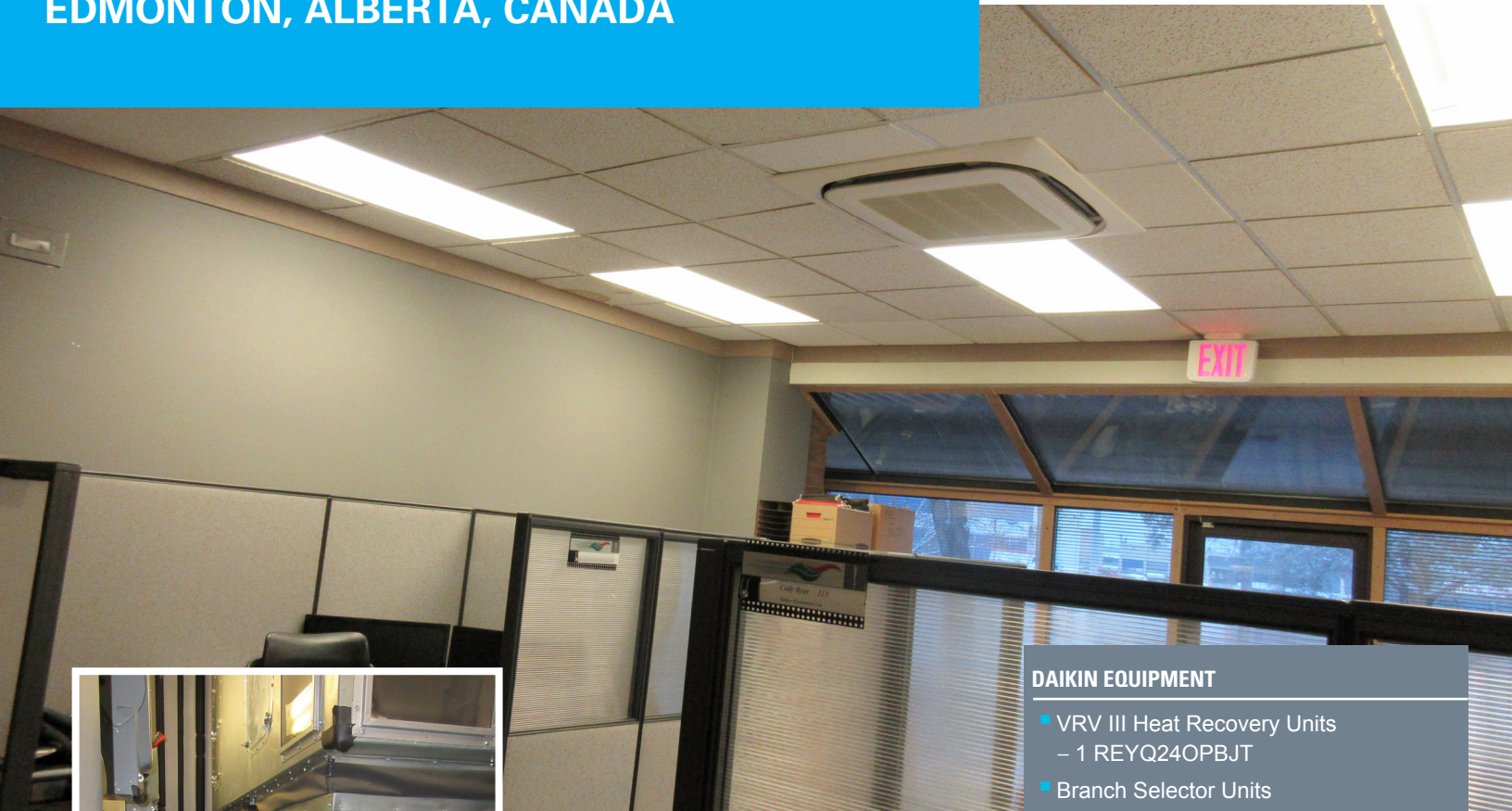
Before



After

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VRV air-cooled condensing units installed in a climate controlled mechanical room equipped with dampers for maximizing all-year round heat pump performance in a cold climate application

FIND OUT MORE ABOUT DAIKIN VRV.

Contact your local dealer or manufacturer's representative.

Additional information

Before purchasing this appliance, read important information about its estimated annual energy consumption, yearly operating cost, or energy efficiency rating that is available from your retailer.

Actual savings and costs will vary. Cost and savings statements are applicable solely to the installation indicated. For additional information please contact the installing contractor, distributor or factory representatives.

DAIKIN EQUIPMENT

- VRV III Heat Recovery Units
 - 1 REYQ24OPBJT
- Branch Selector Units
 - 5 BSVQ36PVJU
- Indoor Wall Mounted Units
 - 1 FXAQ18PVJU
- Indoor Round Flow Cassette Units
 - 3 FXFQ18PVJU
 - 2 FXFQ24PVJU
- Indoor 4-Way Cassette Units
 - 1 FXZQ07MVJU9
 - 7 FXZQ09MVJU9
 - 3 FXZQ12MVJU9
- Indoor Ceiling Suspended Units
 - 1 FXHQ24MVJU
- Indoor Floor Standing Units
 - 1 FXLQ12MVJU9
- DC-Ducted Concealed Units
 - 2 FXMQ18PVJU
- REFNET Branch Piping Kits
 - 2 KHRP25A22T
 - 2 KHRP25M73TU
 - 6 KHRP26A22T
- Intelligent Touch Controller
 - 1 DCS601C71
- Navigation Wired Remote Controller
 - 21 BRC1E71

DAIKIN

Our continuing commitment to quality products may mean a change in specifications without notice.

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