DAIKIN AC®
absolute comfort

BLUEPRINT

Project: Fred Victor Centre - Housing Renovation

Client: Fred Victor

Location: Toronto, Ontario

VRV III

The Challenge:

Limited roof area, structural impact to the building, and additional power consumption to the building

The Solution:

Daikin VRVIII systems

"I was amazed that although we had to include two boilers as back up, even during the coldest parts of the winter, the VRV heat pump was all that was required and the boilers never came on"

"Airways Systems did a great job of the installation"

"Comfort Connections provided a project manager to work with the installation company during the total installation"

" As an Engineering firm doing lots of this type of work, we would definitely spec this Daikin equipment again"

Tak Lau, Takric Engineering Ltd.

" Although we had never used Daikin equipment before, we were pleasantly surprised at how easy and simple the installation went," Remo Di Vito of Airways Systems Ltd.

Project information

Architect: Maurice Mok, Hilditch Architect

Consulting Engineer: Tak Lau, Principal
Takric Engineering Ltd.

Mechanical Contractor: Remo Di Vito
Airway Systems Ltd.

Distributor: Tom Loughran
Comfort Connections

The existing nine storey apartment building in downtown Toronto had only heating provided by boilers. The renovation provided heating and air conditioning to minimize the structural and power impact on the existing building. Daikin VRV systems were selected to suit this application.

There were three challenges that the new system had to overcome. The first challenge was the limited roof area with scattered locations for the outdoor units to be installed. No additional space would be available for HVAC equipment such as a chiller. The second challenge was the structural impact to the building. For conventional air conditioning systems, a chiller and cooling tower would impose large structural load to the building. The third challenge was the additional power consumption of the air conditioning system to the building.

Two Daikin systems serve the residential part of the building. The compact outdoor condensing units were strategically placed on two roof areas to minimize any structural impact to the building and to fit in the limited roof area. In addition, the high efficiency of the Daikin system allows the building to meet the additional load of the electrical services.

Daikin AC Equipment

1 (Model # RXYQ96PTJU) 8 Ton Outdoor Unit

1 (Model # RXYQ120PTJU) 10 Ton Outdoor Unit

1 (Model # RXYQ144PTJU) 12 Ton Outdoor Unit

1 (Model # RXYQ216PTJU) 18 Ton Outdoor Unit

1 (Model # FXTQ12PAVJU) Air Handling Unit

1 (Model # FXTQ18PAVJU) Air Handling Unit

1 (Model # FXTQ24PAVJU) Air Handling Unit

1 (Model # FXMQ07PVJU) DC Ducted Concealed Ceiling Unit

1 (Model # FXMQ18PVJU) DC Ducted Concealed Ceiling Unit

1 (Model # FXDQ07MVJU) Slim Duct Built-In Concealed Ceiling Unit