



Award winning office building using City Multi VRF 2-pipe heat recovery solution. A combination of standard and 100% fresh air ducted indoor units efficiently & quietly delivers comfort to occupants.



Project Info

Application

Floth Sustainable Building
Consultants Head Office

Location

Fortitude Valley, Brisbane, QLD

The Challenge

Whilst keeping Floth Sustainable Building Consultants high green star ratings goal in sight, our challenge on this project was to provide energy efficient, reliable and quiet air conditioning across three Levels of office space including air conditioning to the communication/server room on the roof top level.

A high degree of thermal and acoustic comfort to occupants in the space with a high percentage increase in outside air to be delivered to occupants. Provision for high level interface of air conditioning systems with BMCS was also specified by the client.

The Solution

We have offered CityMulti VRF 2Pipe Heat Recovery solution with High COP condensers. Heat Recovery between indoor units is carried out in the centralised 2-Pipe Branch Controller. This allows energy recovery to be diverted and redirected to the branch that

The Team

Architect

Mondo Architects

HVAC Contractor

Value Added Engineering

Builder

James Trowse

require either cooling or heating, reducing overall running costs and lifting operational COP's.

By providing combination of standard and 100% Fresh air ducted indoor units operating at low fan speeds, we were able to efficiently and quietly accommodate the increase of outdoor air load requirement while increasing thermal comfort to occupants.

We not only provided flexibility in control via AE-200 Mitsubishi Electric proprietary central controller but also provided BacNET interface to a computer-based control system to allow full control and monitoring of our systems.

Awards

First 6 star Green Star – Design & As Built v1.1 certified rating in Australia; First ASBEC Zero Carbon Standard Building in Australia; First 6 star NABERS Indoor Environment rating in Australia.

UNIT INFORMATION



Outdoor Units

PURY-EP600YSLM-A x 1
PURY-EP450YLM-A x 2
MUZ-GE35VAD-A1 x 2



Indoor Units

PEFY-P200VMHS-E x 2
PEFY-P140VMH-E-F x 2
PEFY-P125VMA-E x 5
PEFY-P100HE x 1



BNC

CMB-P1010V-GA1 x 2
CMB-P108V-GA1 x 1



Controllers

BAC-HD150-E x 1
PAR-U02MEDA-J x 15
PAR-31MAAE-J x 2
MAC-333IF-E x 2
PAC-SE41TS x 15