

30 storey Kodo Apartments building in Adelaide uses City Multi R2 series heat recovery VRF with compact plant rooms to maximise residential, retail and communal spaces.



Project Info

Application

Kodo Apartments

Location

Adelaide, SA

The Challenge

The 30 storey Kodo Apartments building in Adelaide design called for a reduction in the allocated plant space for systems such as air conditioning to maximise tenant space.

With over 200 apartments the designers wanted to maximise ground space for retail and the lower level roof for a communal space.

Each tenant would need to be charged for their energy consumption.

The Solution

Mitsubishi Electric City Multi R2 series heat recovery VRF was selected for the project. Each main level has two outdoor units connected to up to nine units on each. Two external plant decks at each level house the outdoor units, with acoustic discharges being installed for noise reduction.

The R2 series allows systems to be grouped together to take

The Team

Client

Flagship Properties

HVAC Contractor

Westside Mechanical Contracting

HVAC Consultant

AECOM Consulting

advantage of the heat recovery benefits from larger systems. Heat recovery is used in the delivery of simultaneous heating and cooling for individual clients.

Single module outdoor units were utilised to reduce plant room space required and were located close to the branch box to reduce the amount of refrigerant required.

The use of small plant decks on each floor meant that the lower level roof was clear for the creation of the Sky Garden. The garden includes lawns, trees, entertainment areas and barbecues.

City Multi R2 is a two-pipe system which uses less piping and connections than a three-pipe system.

Power portioning was integrated into the system so that property manager had access to data via the BMS, so each tenant could be charged for their energy use.

Commissioned: 2019

UNIT INFORMATION



Outdoor Units

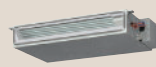
PURY-P550YSLM-A x1
PURY-P450YSLM-A x1
PURY-P300YLM-A x5
PURY-P250YLM-A x40
PURY-P200YLM-A x10

PUHZ-RP200YKA2R1-A x 1
PUHY-P200YKB-A x 2

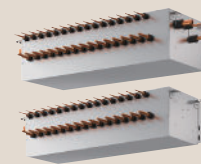


Indoor Units

PEFY-P80VMA-E.TH x6
PEFY-P71VMA-E.TH x41
PEFY-P63VMS1-E x12
PEFY-P63VMA-E.TH x34
PEFY-P50VMA-E.TH x22



PEFY-P40VMS1-E x18
PEFY-P40VMA-E.TH x37
PEFY-P140VMA-E.TH x1
PEFY-P125VMA-E.TH x4
PEFY-P100VMA-E.TH x56
PEA-RP200WJA x1



BNC

CMB-P105V-G1 x9
CMB-P104V-G1 x42
CMB-P1010V-GA1 x2



Controllers

AE-200E x2
PAR-32MAA-J x219
PAC-YG60MCA x3