

Albany House, Esher



It's 'new Daikin for old' as council upgrades offices for tenants

A change of tenants provided a golden opportunity to give a modest three-storey office building in Esher, Surrey, a makeover including efficient new air conditioning and ventilation systems.

Daikin systems had served the building well for more than 20 years, so an upgrade to the latest Daikin Mini-VRV IV S-series and Sky Air systems and VAM Total Heat Exchanger units - units was a logical choice to accompany the redecoration and other interior improvements to suit the incoming tenants, accountancy practice Wellden and Turnbull.

Albany House – formerly Fairmile House – is a 1990s council-owned, brick-clad building on Claremont Lane, next to the town centre car park. Building and interiors specialist Visu Verum was appointed to oversee the refurbishment, with Daikin D1+ Business Partner Direct Cooling Services to install the new air conditioning and ventilation systems. Visu Verum also worked with construction consultants Drake & Reynolds, who had previously occupied part of the building.

The old air conditioning systems had become inefficient by modern standards and as they used the now-banned R22 refrigerant, they could no longer be recharged – so in the event of a component failure or leak, they would no longer be operable.

Visu Verum project manager Andrew Smith says a key consideration of the overall refurbishment was that the council did not want the interior or exterior of the building to look materially different.

Andrew Smith says: "As a result, outdoor units had to be out of the public eye, while indoor components were to be either in the ceiling voids or as inconspicuous as possible."

Year of installation

› 2020

Project requirements

- ☒ Air conditioning
- ☐ Air curtain
- ☐ Air purification
- ☒ Control
- ☒ Heating
- ☐ Hot water
- ☐ Refrigeration
- ☒ Ventilation

Installed systems

- › Mini-VRV heat pump
- › VAM Total heat exchanger ventilation unit
- › Daikin i-Touch Manager
- › Roundflow cassette

The outdoor solution involved locating two high-capacity Mini-VRV condenser units in a revamped gated and fenced area on the property boundary at a front corner of the building, behind a raised planter bed. These units serve the independent systems on the first and second floors.

Also in the enclosure and mounted on the side of the building are two Daikin R32 Multi Series condenser units that serve the ground floor offices, meeting rooms and staff breakout area.

Open plan areas on all floors are served by Roundflow Cassettes, while meeting rooms have wall-mounted units.

The building has sash windows that are treated as non-opening because of the proximity of a busy road and a public car park.

Ventilation for all three floors is provided by the Daikin VAM Total Heat Exchanger units, which provide fresh air while reducing heat loss in winter and heat gain in summer, both of which could otherwise put additional – and uneconomical – pressure on the air conditioning systems.

The air conditioning and ventilation units on each floor are locally controlled through Daikin standard wired controllers. These give people in the building the ability to adjust comfort levels in their areas if necessary. Independent control also provides potential for operating cost savings if, for example, only part of the building is in use.

A Daikin I-Touch Manager, together with energy monitoring software, was installed subsequently.



Kit list

Code	Description	No of units
Ground Floor		
5MXM-N	R32 Multi Series outdoor unit (5 ports)	2
FCAG-B	R32 Roundflow cassette	3
FTXM-M	R32 Standard inverter fan coil unit	2
VAM-FC/J	VAM Total Heat Exchanger ventilation unit	3
BRC1E53C	Standard wired controller	5
First Floor		
RXYSQ-TY1	High capacity Mini-VRV heat pump	1
FXFQ-B	Roundflow cassette	5
FXAQ-A	Wall mounted fan coil unit	3
VAM-FC/J	VAM Total Heat Exchanger ventilation unit	3
BRC1E53C	Standard wired controller	6
Second Floor		
RXYSQ-TY1	High capacity Mini-VRV heat pump	1
FXFQ-B	Roundflow cassette	5
FXAQ-A	Wall mounted fan coil unit	1
VAM-FC/J	VAM Total Heat Exchanger ventilation unit	2
BRC1E53C	Standard wired controller	4
DCM601A51	Daikin i-Touch Manager	1

