

## CASE STUDY | COMMERCIAL CATEGORY | NON FOOD RETAIL





### Daikin heat recovery 'on show' at Japanese cultural centre in London

In a tribute to its Japanese roots, Daikin UK was a chosen air conditioning supplier for the new Japan House cultural centre on London's Kensington High Street.

Japan House is part of an initiative by the Japanese Ministry of Foreign Affairs to showcase all that Japan offers, especially Japanese art, design, gastronomy, innovation and technology. It is one of three Japan Houses worldwide: the others are in Los Angeles and Sao Paulo.

In collaboration with some of Japan's top creative talent, Japan House London has created an exciting programme that offers visitors an 'authentic and inspiring'encounter with Japan.

The London centre opened in June 2018 in an iconic art deco building originally occupied by the Derry & Toms department store. It was officially opened in September 2018 by HRH Prince William, Duke of Cambridge. It has attracted over 400,000 visitors in the nine months since opening.

The Daikin VRV IV heat recovery system provides cooling and heating for the centre's popular AKIRA restaurant as well as offices and meeting rooms on the ground and first floors.

Choice of this system means the centre will benefit from the greater overall efficiency of the Daikin three-pipe heat recovery system which uses less energy than other systems to recover heat. Dedicated gas, liquid and discharge pipes enable the system to recover heat at lower condensing temperatures than other solutions.

The system also offers opportunities to deliver simultaneous heating and cooling - and the economical reuse of waste heat. Condensing units feature heat exchangers that are engineered for high seasonal efficiencies.

Variable refrigerant technology automatically adapts the refrigerant temperature to the load for optimal comfort, and increases seasonal efficiency by up to 28% when compared to other solutions.

Outdoors, Japan House's three Daikin heat recovery condensing units are mounted behind acoustic screens on a rooftop – effectively the seventh floor - overlooking the famous sixth floor roof garden area.

### Year of installation

> 2019

# Project

requi	rements
$\checkmark$	Air conditioning
	Air curtain
	Air purification
$\checkmark$	Control
	Heating
	Hot water
	Refrigeration

### Installed systems

Ventilation

- VRV IV Heat Recovery
- Concealed ceiling unit
- Wall mounted unit
- Sky Air seasonal smart outdoor unit
- Sky Air wall mounted unit
- I-touch manager



Most of the installation indoors consists of medium static concealed ceiling units. There is no ceiling in the restaurant, so all surfaces and equipment above normal ceiling height are 'on show' – but sprayed black.

There are also some wall mounted Daikin units in smaller office areas.

Two Daikin Sky Air Seasonal Smart systems provide cooling for a communications room and a lift motor room.

Premium wired remote controllers are provided for each area or office, and the entire Daikin installation is controlled by an Intelligent Touch Manager. This is linked to the wider Building Management System through a Bacnet gateway interface.

The system was installed by Reigate-based mechanical services contractor Borahurst and designed by London-based consultants, Leonard Engineering Design Associates.





Leonard Engineering consultant Hoss Jafari savs

"the project design was straightforward – even the relatively long refrigerant pipe runs between outdoor units and branch selector boxes were no issue".

Daikin's BS boxes include the unique single port box, which is ideal for remote rooms. Its multi-port boxes are 55% smaller and 41% lighter than other multi-port units. They are also easier to install, with fewer brazing and wiring points.

#### **Kit List**

Code	Description	No of units
REYQ-T	VRV IV Heat Recovery condensing unit	3
FXSQ-A	Concealed ceiling unit (medium static)	36
FXAQ-P	Wall mounted unit	2
RZQG-L	Sky Air Seasonal Smart outdoor unit	2
FAA-A	Sky Air wall mounted unit	2
BRC1E53A	Premium wired remote controller	20
DCM601A51	Intelligent touch manager	1
DMS502A51	Bacnet gateway interface	1





Daikin Airconditioning UK Ltd The Heights Brooklands Weybridge Surrey KT13 0NY Tel:01932 879000