



K-Way



Daikin's 'greener' solution for Covent Garden retail premises

R32 air conditioning systems from Daikin UK were the perfect choice for premises being refitted for high end clothing retailer, K-Way, at the corner of London's Covent Garden piazza.

The ground floor shop with basement office and storage at 4 Henrietta Street are cooled in summer and warmed in winter by four high efficiency Daikin split and Sky Air systems based on the low global warming potential (GWP) R32 refrigerant.

The premises, together with privately owned apartments on each of the three upper storeys, make up a Grade II listed townhouse, three windows wide, said to date from 1780. Its façade was modernised during the 19th century and conversion of the ground floor and basement to retail use followed in the mid-20th century. The ground floor has a single storey extension at the rear with a flat roof and two low pyramid roof lights.

The flat roof area provided a suitable area for six earlier air conditioning systems that Daikin D1 Partner Royale removed before installing the new Daikin R32 systems in their place.

Jeremy Rolland, Project Sales Director at Royale, says the Newbury-based nationwide refrigeration and air conditioning contractor handled the installation for Leicester-based fit-out specialist Quinn Contracts, for whom it regularly carries out HVAC design and installation work.

He says: "The requirement for air conditioning on this site was simply that it's an old property. We were a bit limited as to what application could be installed here, due to the nature the site and its location. But it was a perfect opportunity to install a heat pump system providing comfort cooling and a primary source of heating.

Year of installation

› 2017

Project requirements

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

Installed systems

- › Sky Air outdoor unit (R32)
- › Roundflow Cassette (R32)

“We’re looking to use R32 solutions wherever possible for installations up to 14kW. And we are looking forward to seeing VRV systems on R32 sometime in the future.”

“For this project, we selected two Daikin R32 Sky Air systems with high-COP Roundflow cassettes, each providing 13.6kW nominal cooling and 13.5kW nominal heating, to serve the retail and basement area. The Roundflow cassette is a perfect way of distributing the airflow across these zones.

“There are also two R32 split systems using Daikin high level wall mounted fan coils. These two standard inverter systems each provide 6kW cooling or 7kW heating to the rear of the ground floor, under the roof lights areas.”

The systems are independently controlled with wired zone controllers: ground floor front, ground floor rear and basement.

Daikin UK’s Sky Air systems are designed for small commercial applications such as shops and offices, and combine heating and cooling. An optional extra with the Roundflow cassette is an auto-cleaning décor panel, which maintains system efficiency. The split systems, for smaller applications, offer Flash Streamer technology.

Jeremy Rolland says: “The reason Royale selected Daikin R32

systems is because as a company we are trying to push green environmental engineering and solutions – and with that in mind, R32 refrigerant has a GWP rating of 675, which is one third that of R410a. So, it’s a great opportunity to install these products on this site in the City of Westminster.

“The new Daikin R32 systems are not only inverter driven, but as they are on R32 with the lower GWP we are providing our client with a much better energy efficient solution for lifecycle, running costs and the environment.”

Royale completed the installation ahead of programme in just five days.

“Daikin has helped Royale tremendously with the transition to R32, not only on knowledge and awareness of the F-gas legislation and the rules, but also on providing our in-house engineers with all the training and support necessary for them to carry out the works correctly,” says Jeremy Rolland.

Royale Technical Director James Sheppard says: “Our engineers have completed the R32 conversion course at Daikin’s Woking training Centre. They found it very informative with the key understanding being that the transition from R410a to R32 is quite straightforward.

Kit List

Code	Description	No of units
RZAG-LV1	R32 Sky Air outdoor unit	2
FCAHG-F	R32 High COP Round flow cassette	2
RXM-M	R32 Split outdoor unit	2
FTXM-M	R32 Wall mounted fan coil unit	2



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