

Pomme d'Or Hotel, Jersey



Hotel's golden opportunity to trim costs with auto cleaning ducts

Like many other businesses, hotels are often on the lookout for smarter ways of working to keep costs down, profits up and prices fair – while maintaining high levels of guest comfort. For a high-end Channel Islands hotel, the opportunity to eliminate a significant maintenance cost was enough to switch allegiances when its old air conditioning system was replaced.

They chose a Daikin heat recovery system, with Daikin's innovative auto cleaning ducts and the stylish new 'Madoka' controller in the guest rooms.

The Pomme d'Or Hotel on St Helier's Liberation Square heads the hotel and leisure portfolio of Seymour Hotels of Jersey. The long-established 143-bedroom art deco hotel – commandeered by invading forces in World War 2 – has a prime location close to the island's main business district and overlooking the port and marina. The hotel enjoys year-round popularity among business and holiday visitors.

As part of Seymour Hotels' ongoing investment programme, the group decided it was time to replace the 'creaking' air conditioning system serving the guest rooms.

David Donoghue, group maintenance manager, says the ageing two-pipe heat recovery system was close to collapse.

He says: "It should have been replaced sooner. But in fairness, the system served us well for more than 20 years. The coastal climate had taken its toll on the metalwork of the condensing units on the roof. As the system used the now-banned R22 refrigerant, this would have prevented any further maintenance or repairs to components in the refrigerant circuits.

"With our air conditioning contractor we looked initially at replacement options from the same manufacturer. We then found that other companies could offer comparable products and prices. Ultimately we chose the Daikin solution for heating and cooling, because it included the auto cleaning duct on the indoor units."

The auto cleaning duct avoids accumulation of dust on the filter – which would otherwise impair efficiency of the unit and increase operating costs. In fact, the accessory is calculated to cut operating costs by 20%. The attachment cleans the filter regularly and stores the dust in a dust box which can be emptied by housekeeping staff with a vacuum cleaner.

Year of installation

› 2018

Project requirements

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

Installed systems

- › VRV-Q Heat Recovery
- › Slim ducted units
- › Auto cleaning accessory
- › VRV S series condensing unit
- › Madoka controller
- › ITM



The Pomme d'Or's air conditioning upgrade was undertaken mostly during winter when occupancies dip due to fewer holidaymakers. Steve le Bailly, director of Jersey-based Daikin D1 Partner Aston Services, was in charge of the phased project.

He says: "Our biggest problem was removal of the old condensing units, which were so badly rusted that they would have been unsafe to lift out as individual units – so we cut them up on the roof and moved the parts in bags.

"The new installation consists of 14 systems with 28 condensing units – all of which have Blygold treatment for added protection in the coastal environment. The condensers are Daikin's R410A-based VRV Q-series, specially developed for replacement of R22 systems."

The VRV Q-series saves on installation time and cost by reusing the R22 pipework, although Aston Services had to install an additional pipe as Daikin's heat recovery systems use three pipes for maximum heat recovery.

Indoor units are FXDQ-A slim ducted fan coils, which with a height of just 200mm are ideal for fitting in the dropped ceiling typically found in hotel bedroom entrance passages.

To minimise the impact of on hotel operations, rooms were taken out of service in batches of seven to 16 at a time during the five month project. While the air conditioning work was in progress, the hotel used the opportunity to upgrade some bedrooms and bathrooms.

The rooms were returned to service with the new air conditioning systems fully commissioned, and have been fitted with the sleek and elegant new 'Madoka' controller. Offering energy saving functions especially for hotels and other commercial buildings it has intuitive touch button controls and offers advanced settings and commissioning by smartphone and Bluetooth.

David Donoghue says: "The whole installation is controlled by a Daikin Intelligent Touch Manager mini-BMS. It's programmed to bring rooms automatically back to 21°C if the temperature is above 28°C or below 16°C, and adjustments can be made centrally from the reception desk, if necessary."

Aston Services also installed Daikin VRV S Series condensing unit to serve three ducted units in the Pomme d'Or Hotel's Orchard Suite function room. Its other public areas are served by a chiller that is due for replacement soon.

"We will be looking to Daikin for a suitable solution for this – and other projects as they arise at any of our Jersey properties," says David Donoghue. "It makes sense to standardise if you are happy with the systems and the service."

Kit List

Code	Description	No of units
RQCEQ-P3	VRV-Q heat recovery condensing unit	28
FXDQ-A	Slim ducted fan coil unit	143
BAE20A62	Auto cleaning duct accessory	143
BRC1H519W	Madoka room controller	143
RXYSQ-TY1	VRV S Series condensing unit	1
	Ducted fan coil unit	3
DCM601A51	Intelligent Touch Manager	1

David Donoghue says:

"This is the big selling point that tipped it for us. We used to spend a lot of time cleaning the filters by hand every two or three months. It was only about 30 minutes in each room, but it was disruptive and expensive. And as the engineer had to remove a ceiling panel to access the filter each time, it inevitably led to decoration issues.

"Now the housekeeping staff simply insert a vacuum nozzle into a discreet port on a routine basis. If they forget and the container becomes full, a warning shows on the room's controller.

"The other big benefits are that we get greater efficiency from the systems and we can deploy our maintenance team more efficiently."



Daikin Airconditioning UK Ltd The Heights Brooklands Weybridge Surrey KT13 0NY Tel: 0845 6419000

To see our full range of case studies please visit our business portal my.daikin.co.uk
If you have a project that you would like turned into a case study please contact marketing on marketing@daikin.co.uk