

Admiral Park, Guernsey Development



Daikin VRV with Heat Recovery helps achieve BREEAM status at Admiral Park, Guernsey

At the heart of St Peter Port in Guernsey, Admiral Park stands on the site of a former gasworks. This once-brownfield site has become a landmark urban redevelopment with stunning sea views across the Channel Islands, and Daikin is proud to have played a key part in delivering this mammoth project.

Comprop has been developing Admiral Park for more than 20 years. Having completed phase one of Admiral Park Plaza and with planning granted on phase two, the main contractor Rihoy & Son commissioned C8 Mechanical & Electrical to carry out a 'test to fit' design based on the planning drawings with a mindset of achieving BREEAM's

'very good' status for the six-storey commercial building, Plaza House.

Not only was this the first BREEAM status project for C8, but it was also a first for the island of Guernsey so there was intense pressure to get everything right.

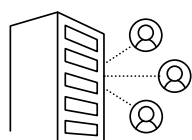
Key Project statistics

36 VRV roof-mounted condensers

195 aircon units fitted

12,000m of refrigerant pipework installed

38,000m³/h per hour of air supplied into the building to create a fresh air environment



OFFICE



Unique challenges

As a Daikin D1+ business partner, C8 enlisted Daikin's support in overcoming the building's challenges: with minimal space to fit equipment onto the roof plant, positioning and fitting were key to maximising efficiencies. This became a collaborative process between C8 and Daikin to understand equipment sizes and specs to ensure everything would fit correctly on the roof space and be sufficient to achieve the necessary BREEAM accreditation.

BREEAM accreditation wasn't the only consideration. Situated just 500m from the sea, salt corrosion is a daily challenge. Daikin's Blygold anti-corrosion treatment was applied to all outdoor heat exchangers to protect components from the high salt and humidity levels found on the coast, providing corrosion resistance and prolonging the life of the heat exchanger by up to a factor of three.

Supplying the 36 VRV IV condensers and eight Sky Air Alpha series condenser units with Blygold-coated was easy as Daikin's Daventry warehouse has a fully-equipped Blygold facility, with treated units available off the shelf, subject to stock availability, or within two weeks of order.

The eight Sky Air Alpha series were installed to service the on-site server rooms, all units were controlled via Daikin's iTouch Manager offering seamless control and ensuring efficient operation.



"There are always challenges with a project of this size but we worked together to find solutions, with an excellent result.

The system is really efficient and well balanced, maximising the solar gain from the sun on the south and transferring recovered heat to the north side of the building, making it cost effective to run,"

**Le Sauvage, Director,
C8 Mechanical & Electrical.**





Heat recovery

Three-pipe heat recovery VRV IV condensing units were installed down the east and west sides of the building, as well as four Daikin Air handling units which provided fresh air into the building. All Daikin products were connected into the Daikin i-Touch Manager which enabled seamless central control. The six-storey, floor-to-ceiling building glazing maximises natural light, providing views on all elevations. Utilising solar gain, the Daikin VRV heat recovery system boosts heating and cooling efficiencies year-round.

"There are always challenges with a project of this size but we worked together to find solutions, with an excellent result. The system is really efficient and well balanced, maximising the solar gain from the sun on the south and transferring recovered heat to the north side of the building, making it cost effective to run," said Ian Le Sauvage, Director, C8 Mechanical & Electrical.

"We've worked in partnership with Daikin for the past nine years. Their training and technical support are excellent and, with our D1+ premium partner status, we can offer our clients the peace of mind of a 7-year warranty," he concluded.



"The Rihoy & Son, C8 and Daikin collaboration has helped us deliver an impressive building, the most advanced of its type on the island,"

**Steve Marie, Managing Director
Comprop (C.I.) Ltd**



One of the main advantages is the Daikin i-Touch Manager which can link all equipment onto one platform offering seamless control.

**Richard Jones, Business Development Manager
Daikin UK**



The result

"The energy metering, high-quality glazing and thermal insulation, as well as the state-of-the-art mechanical and electrical systems, are designed to minimise energy consumption throughout Plaza House. The Rihoy & Son, C8 and Daikin collaboration has helped us deliver an impressive building, the most advanced of its type on the island," said Steve Marie, Managing Director, Comprop (C.I.) Ltd

Not only is Plaza House the tallest commercial building on the island, but it's also the first building on Guernsey to receive BREEAM accreditation for energy performance and sustainability.

Kit List

Model	Description	No of units
REYQ-U	VRV IV+ Heat Recovery Condensing	36
FXSQ80A	Concealed Ceiling units	185
FBA100A	Ducted Sky Air	8
RZAG100NY1	Sky Air Alpha outdoor unit	8
ADT08FCN	Air Handling Units - Modular R	3
ADT07FCN	Air Handling Units - Modular R	1
BRC1H52W	Madoka Controller - white	187
DCM601B51	iTouch Manager	6

For further details visit our website:

https://www.daikin.co.uk/en_GB/about/case-studies/admiral-park-plaza.html



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