CASE STUDY | COMMERCIAL
CATEGORY | LEISURE

David Lloyd, Beaconsfield

Smart looking gym switches to the stylish Madoka controller

Replacement of a popular Buckinghamshire gym's air conditioning systems called for some unusual weightlifting, so a mobile crane was drafted in to help install the new condensing units.

The new systems are individually controlled by Daikin Madoka controllers. Stylish and technically advanced, Madoka's good looks front a compact, wall mounted wired controller that's easy to use day-to-day – while allowing a wide range of adjustments for the installer to set up via a smartphone app.

Surrounded by its parking areas, tennis courts and outdoor swimming pool, the David Lloyd health club at Beaconsfield is designed for good looks from all angles. Its condensing units are located on a flat roof section at the rear, but completely screened by sloping roof sections.

The club, opened in 2001 and under the David Lloyd banner since 2008, is situated in the village of Wooburn Green, conveniently placed to serve members in Beaconsfield, High Wycombe and surrounding areas.

Operations manager Sophie Pain says there is an unusual demand on air conditioning for temperature and humidity control as there is no wall between the club's gym and the 25 metre indoor pool.

"As a result, with the pool water heated to 29°C we need the air conditioning on all the time to maintain a comfortable 20°C in the gym," she says. "We're open for 17 hours a day on weekdays and 13 hours a day at weekends."

With its earlier Daikin R410A systems coming to the end of their service life and at the top of David Lloyd's replacement schedule, the club opted for a straight upgrade to the latest Daikin R410A-based packaged systems for commercial applications.

Year of installation

› 2019

Project requirements

- [x] Air conditioning
- [ ] Air curtain
- [ ] Air purification
- [x] Control
- [ ] Heating
- [ ] Hot water
- [ ] Refrigeration
- [ ] Ventilation

Installed systems

› Roundflow Cassette
› Sky Air Condensing unit
› Madoka Controller

Nationwide's Matt Catchpole says: "An advantage of the chosen solution is that it uses the existing refrigerant pipes linking the indoor and outdoor units. This saved time on the project, so that any inconvenience to the club or its members was minimized."

Each of the four 25kW condensing units at Beaconsfield drives a pair of 12.5kW Roundflow cassettes.

Daikin D1+ Partner Nationwide Air Conditioning called in London-based Emerson Crane Hire to lift the old condensing units off the roof and replace them with the new units.

In a convenient corner of the car park from 8am to 10.30am on a Wednesday, the 40-ton crane with its telescopic boom at a 28 metre radius, soon had the units in position for the installation team to complete the connections. While this was in progress, Nationwide engineers were also working inside the club to install the new Roundflow cassettes.

Sophie Pain says: "We were without air conditioning for a couple of days while the engineers worked round us, but it was not a problem. There has been a noticeable improvement in the gym environment since the new units were switched on."

The outdoor units used at Beaconsfield are available in 20kW and 25kW capacities. They can connect to a wide range of indoor units and support maximum piping length of 100m and a maximum height difference of 30m. In heating mode they can operate in outdoor temperatures down to -15°C.

The inverter compressors continuously adjust speed to actual demand. – so there are fewer power-consuming starts and stops, resulting in lower energy consumption (up to 30%) and more stable temperatures.

Kit List

Code	Description	No of units
FCAG125A	Roundflow Cassette	8
RZQ250C	25kW Condensing Unit	4
BRC1H519W	Madoka Controller (white)	4

Daikin Airconditioning UK Ltd The Heights Brooklands Weybridge Surrey KT13 0NY Tel: 01932 879342

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**