

Quayside Lodge, Chelsea



Quayside Lodge Ambient Loop Heat Network

Daikin's low carbon, heating, cooling and heat recovery solution for a prestigious London Conservation Area development

Sitting within the Sands End Conservation Area, Quayside Lodge is a stunning 10-storey mixed-use development by SMC Property.

This elegant riverside development - also known as Chelsea Riverview - comprises 110 stylish apartments with stunning views of the Thames and London's iconic skyline. The main contractor, CField Construction, handled all design and construction of the development including external works, landscaping, and ancillary spaces.

A user-friendly solution

Craig Herschel, Project Manager at CField Construction says, "We were considering installing another heating system, but our M&E contractor, Link365 has a long history with Daikin

and recommended their heat pump solution. Not only is it much more end-user friendly, Daikin is the market leader and we wanted that level of assurance for this prestigious development."

Daikin's Applied, Commercial and Residential heating products work together to create an efficient system for new build apartments. By reducing the typical heat loss found in communal heating systems, this integrated solution helps save energy - benefiting both occupants and the environment.

Along with three Applied air source heat pumps on the roof, acting as the central plant for the system, each apartment has an Altherma water source heat pump to provide individual heating and domestic hot water.

Also connected to the same system are two water cooled VRV heat pumps that provide space heating or cooling to the communal and amenity areas.



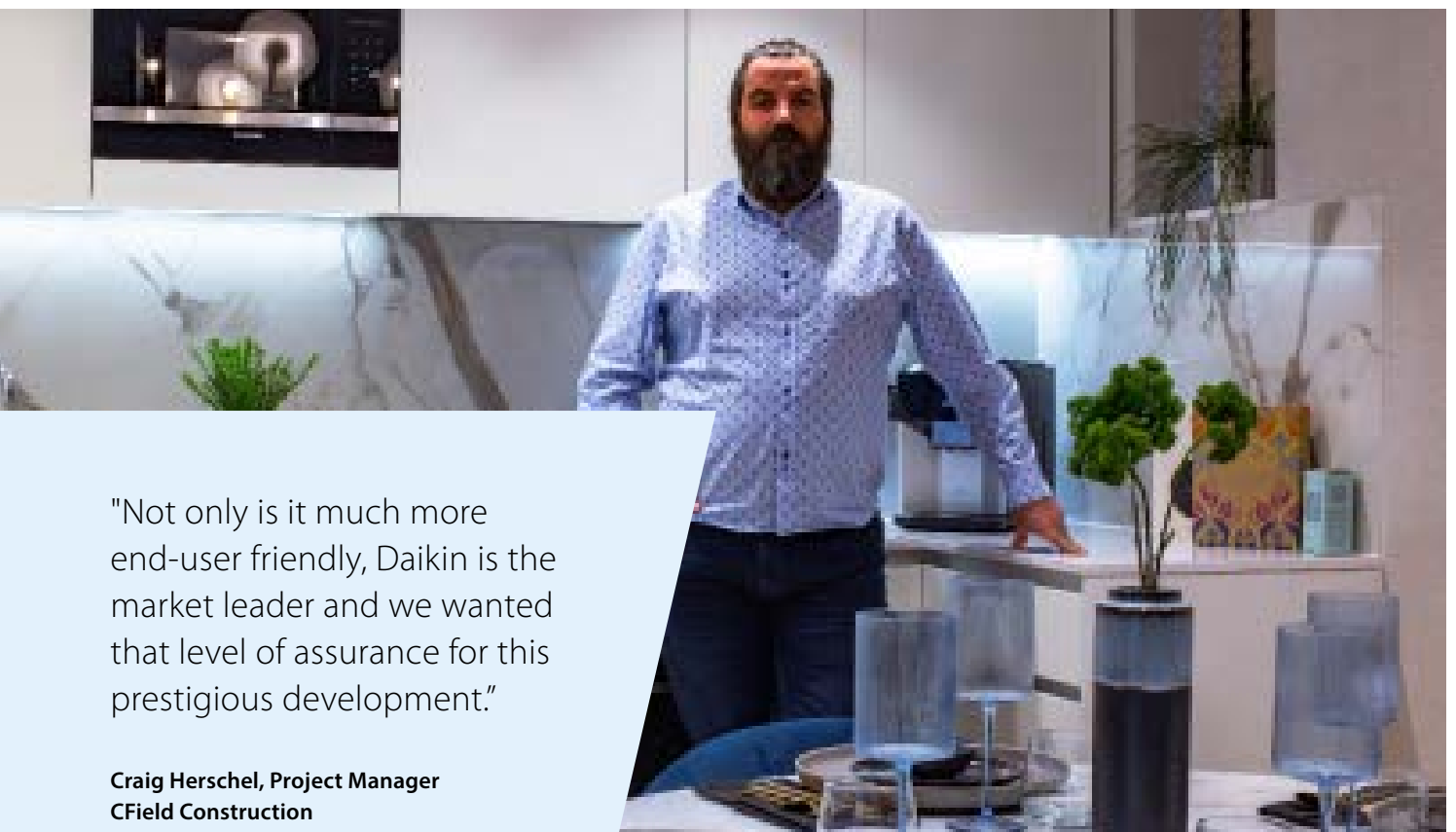
RESIDENTIAL BUILDING



Efficiency at low temperatures

Fabio Inacio, Engineering Manager at Link365 says, "Heat pumps are one of the best low-carbon alternatives to centralised boilers in a plant room, but they need to be efficient enough to run at low temperatures to avoid heat losses in corridors and open spaces. It's a challenge. At Quayside Lodge, we installed three Daikin air source heat pumps on the roof to produce energy which enters each apartment through an ambient energy loop at about 25°C. The lower ambient loop temperatures mean less heat loss in the communal, open spaces."

Each apartment is equipped with its own Altherma water source heat pump. This system takes heat from the ambient loop and boosts it to a higher temperature, supplying the apartment with hot water and heating through a combination of fan coils and radiators.



"Not only is it much more end-user friendly, Daikin is the market leader and we wanted that level of assurance for this prestigious development."

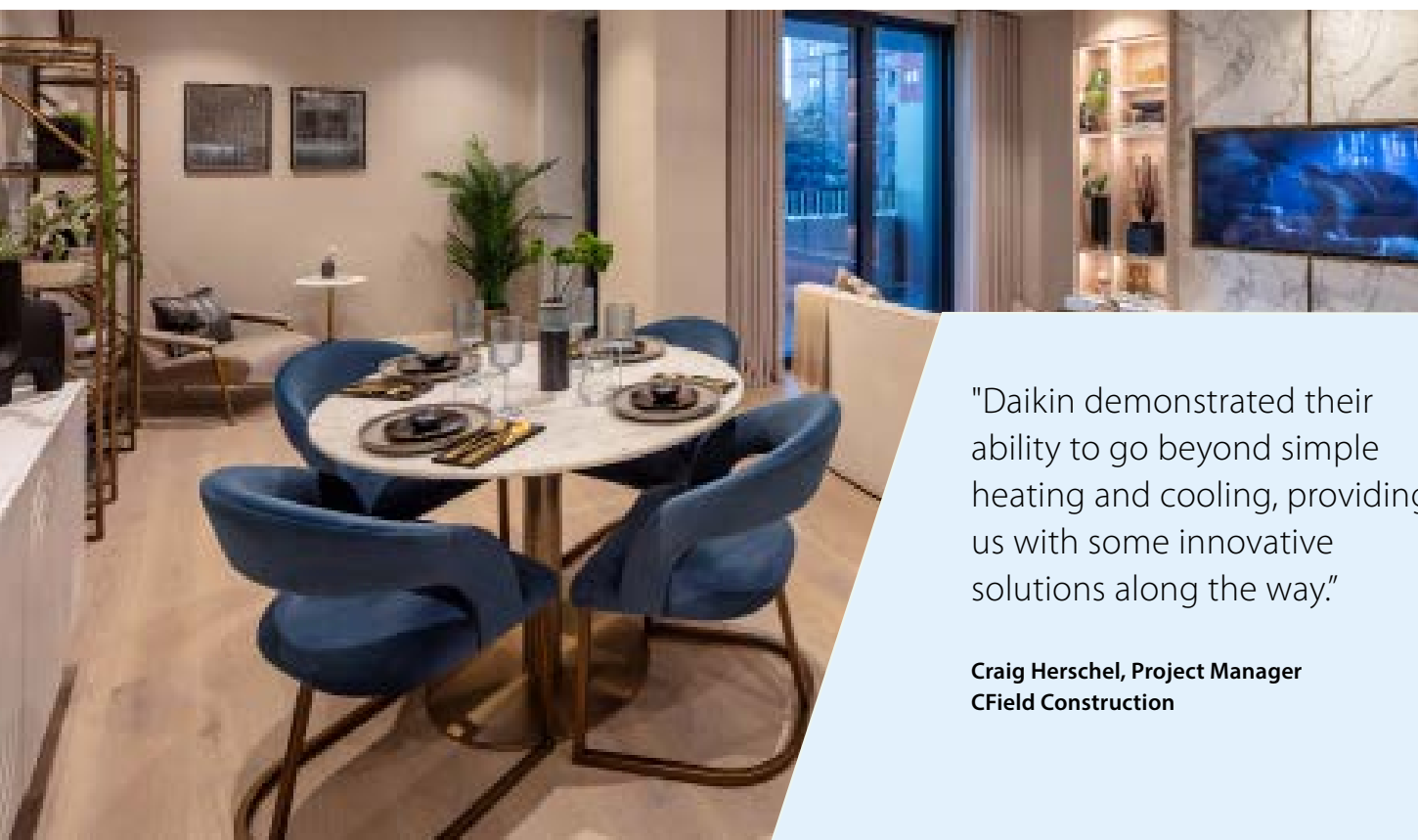
Craig Herschel, Project Manager
CField Construction



Meeting low noise requirements

A key priority for this site was reducing noise to preserve the tranquility of the surrounding area, especially within the Conservation Area.

Craig Herschel explains, "We originally planned for each roof-mounted Applied air source heat pump to have its own acoustic jacket. Daikin proposed a much neater solution, a custom-fit acoustic housing to reduce the ambient noise levels to meet the stringent planning criteria."

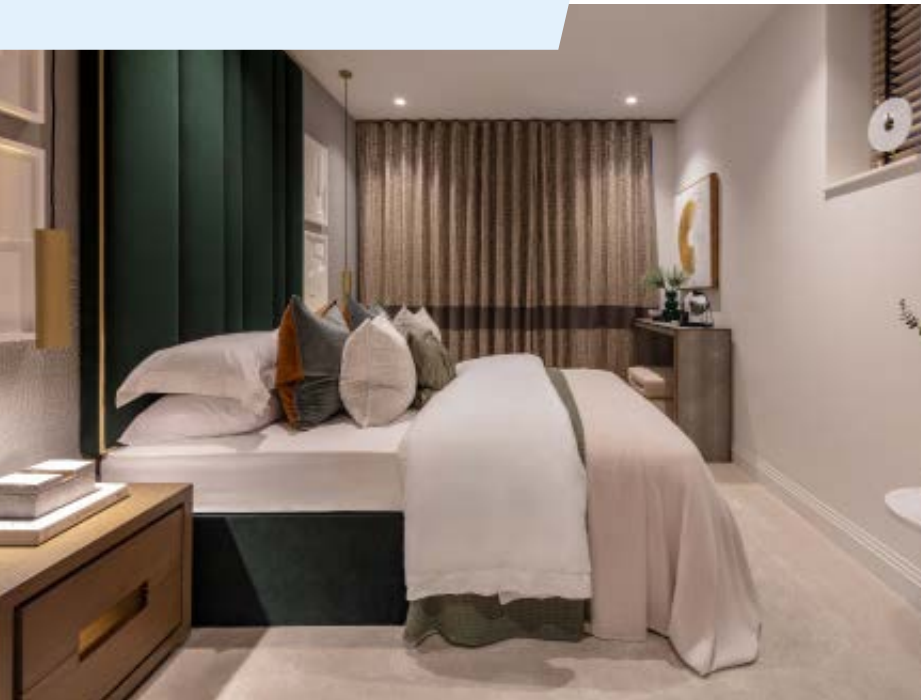


"Daikin demonstrated their ability to go beyond simple heating and cooling, providing us with some innovative solutions along the way."

Craig Herschel, Project Manager
CField Construction

**Summing up the Quayside Lodge project,
Craig Herschel says,**

“We’ve been impressed with Daikin. Not only did the units come as they should from the factory, which in our experience is unusual, but the installation was also straightforward. Daikin demonstrated their ability to go beyond simple heating and cooling, providing us with some innovative solutions along the way.”



Kit List

Model	Description	No of units
EWSAH06UD9W	Altherma 3 WS (heating only)	37
EWSAX06UD9W	Altherma 3WS (heating & cooling)	73
EWYT215B-XRA2000	Applied heat pump	3
RWEYQ10TQ	Water Cooled VRV IV	1
RWEYQ8TQ	Water Cooled VRV IV	1

Daikin Airconditioning UK Limited
The Heights Brooklands Weybridge Surrey KT13 0NY
Tel: 01932 879000 daikin.co.uk

For further details visit our website:
https://www.daikin.co.uk/en_gb/residential/inspiration/case-studies/quayside-lodge