

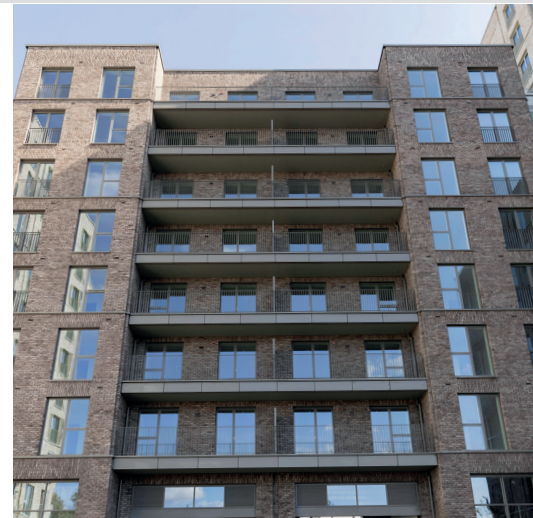


CASE STUDY

OSIER WAY, LEYTON E10

KEY FACTS

Project title: Osier Way
Services: Mechanical, Electrical & Public Health Design and Build
Client: Pocket Living
Contractor: Bennett Construction
Duration: 18 months
G&H divisions: Building Services, Air Conditioning



Osier Way E10 is a brand new mixed-use development boasting 197 one and two bedroom apartments and five retail units.

The Pocket Living homes are designed for first-time buyers in fantastic locations across London.

HEADLINES

MIXED-USE DEVELOPMENT INCLUDING 197 BUILD TO RENT AND AFFORDABLE HOUSING APARTMENTS

DELIVERED BY AN 80-STRONG TEAM

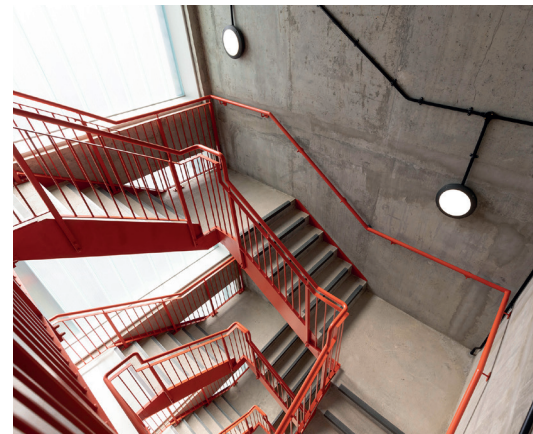
TOTAL CARBON SAVINGS GENERATED APPROX. 54,362 KGC02/ANNUM, THROUGH INNOVATIVE DESIGN

ALL 197 SERVICE CUPBOARDS CONTAINING THE ELECTRICAL CONSUMER UNIT, MECHANICAL VENTILATION HEAT RECOVERY UNIT (MVHR), AND HEAT INTERFACE UNIT, WERE PREFABRICATED OFFSITE - A FIRST FOR G&H GROUP

SECURED BY DESIGN (SBD) APPROVED

TM59 MODELLING ASSESSED, TO MITIGATE THE RISK OF OVERHEATING AND ENSURE OCCUPANT COMFORT

REGULAR HEALTH AND SAFETY VISITS





HOW WE DID IT

Following a successful tender, main contractor Bennett Construction appointed G&H Group in a complete design and build mechanical, electrical and public health (MEP) contract.

G&H Group's design team created all drawings of the building in Revit, ensuring the coordination of MEP services with architecture and structure, including corridors, risers and plant spaces.

Part of the process was considering which materials would be the best quality, yet cost-effective too. One key item valued engineered was the lighting. A number of light fittings were specified; G&H Group reviewed and they identified a more cost-effective solution.

Each of the 197 apartments features a prefabricated service cupboard containing the electrical consumer unit, MVHR and heat interface unit. Bennetts specifically requested that

G&H Group consider pre-fabricating the service cupboard. In collaboration with Leeds-based Prefabricated Solutions, G&H Group, for the very first time, organised for all 197 service cupboards to be built offsite.

It was imperative that the design of the service cupboards was 100 percent correct, as they were built in advance of the onsite construction programme, and any error would have been replicated multiple times. G&H Group implemented a rigorous process of upfront detailed design and coordination work, adopting a thorough approval process with Prefabricated Solutions, which included a visit to their factory with the client to review the work.

The heat network was designed in accordance with CIBSE CP1 guidance, which assisted in reducing the main plant sizing,





pumps and pipework for better energy efficiency and system performance. The main boilers were reduced from 922kW to 800kW, resulting in lower carbon emissions. This contributed to the total carbon savings generated through G&H Group's design, approximately 54,362 kgCO₂/annum, equating to a five percent reduction in comparison to the initial scope.

G&H Group maximised the roof area with an array of 19.68kWp PV panels, generating approx. 17,000kWh of electricity per annum, which will be used solely by the site with no export to the national grid.

High grade filters were installed in the ventilation system, combining G3 and carbon filtration to ensure compliance with a strict air quality requirement.



Michael Drage, Head of M&E at Bennett Construction said:

We are very impressed with G&H Group's work on the Osier Way project. The team had a can-do attitude and worked collaboratively to ensure that the project was completed on time and to the highest standard. It was the first time we partnered with G&H Group, and as a result of the great working relationship we developed, we are working with them on a second project.



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