

CARDO

Retrofit Solutions



STUDY

London Borough of Enfield

PROGRAMME

Retrofit Solutions

PURPOSE

Customer Experience

CONTRACT

Carbon Neutral Solutions

Issue

Cardo Carbon Neutral Solutions and the London Borough of Enfield (LBE) alongside the Greater London Authority (GLA) have begun the journey towards creating Net Zero homes for their residents.

LBE carried out a review of their properties to identify homes suffering from poor energy performance, resulting in residents incurring higher energy bills. LBE identified 44 semi-detached solid brick-built properties constructed in the 1930s.

All properties selected have an Energy Performance Certificate scoring of D or below and are suffering from condensation issues.

Solution

Cardo worked to understand LBE's aspirations for this retrofit project, and then spoke with the residents of the properties to understand what's most important to them when developing the retrofit design. This resident engagement is a continual process throughout the project.

Cardo is working in partnership with Bow Tie Construction who are recognised award winners in retrofitting, providing

their recognised design solutions. Sciana are also partners and will be supporting this project as Retrofit Assessors and retrofit coordination, ensuring a seamless development of a solution that not only meets the performance targets but maintains value for money.

The new retrofit design combines air-tightness, insulation, ventilation, new heating and hot water systems, solar PV, and battery storage.

Outcome

Allowing residents input into the design and the process is vital to maintaining a working relationship throughout the project. Ensuring continued regular engagement keeps residents motivated and reduces the potential of them wanting to withdraw from the programme.

Having a completed stock condition survey by the client allowed us to identify any enabling works upfront, which is key to ensuring the project forecast timeline is achievable. Understanding whether items like the roof require replacement helped to manage cost forecasts, and also had an influence on the design and potential system elements.

After successfully completing the first wave of properties, we have achieved an average

reduction of 3 Tonnes in CO2 emissions, annually, for each property and an average decrease of 8,099kWh per year in space heating, achieving an EPC rating of B.

Cardo is committed to maintaining close collaboration with our partners and residents to help them fully make use of the benefits of their retrofitted home. We are actively working together to identify and implement small adjustments in residents' usage patterns that can further enhance these benefits.

