



Four new zero carbon, family council homes in Greenwich

Redevelopment of a disused site into a new residential development built using sustainable modern methods of construction.



Overview

Name: The Triangle

Client: Royal Borough of Greenwich/Blakeney Leigh

Type: New Build

Value: £ 1.95m



Scope

- Demolition of existing structures
- Construction of four net zero carbon homes using sustainable method (SIPs)
- 100% part M/4/2 compliant
- Triple glazing
- Solar panels
- LED lighting
- High efficiency air source heat pumps
- Private south-facing gardens
- Refuse stores and cycle spaces
- Landscaping to surrounding area



Benefits

- ✓ Low carbon residential development
- ✓ Sustainable construction materials (MMC)
- ✓ Redevelopment of a previously under-utilised site
- ✓ Provision of much-needed council housing in Royal Greenwich
- ✓ Low running costs and minimum maintenance requirements

Affordable new council homes

The Triangle is one of a number of projects under the Council's Greenwich Builds scheme to provide much-needed new affordable housing in the borough. The development comprises four new three and four-bedroom high quality, characterful, council homes, which will all be offered for social rent by Royal Borough of Greenwich.

Initial challenges

Work on the project began back in November 2021. Elkins was tasked with redeveloping a previously disused site into a new residential development. The location - in the middle of an existing council estate - posed a number of challenges.

It was essential that the new properties were designed to be in keeping with the character of the local area. One aspect of this was the careful consideration given to the heights of the homes.

To maximise the amount of internal space, while ensuring the properties did not exceed the heights of surrounding buildings, changes to the design were required post planning approval. Elkins submitted an NMA to change the original steel frames to a timber frame solution, reducing the parapet heights on all four properties and introducing a brick soldier course in lieu of the metal channels, which were set to be attached to the steel frame.

The resulting homes are three storeys with a flat roof, which ties into the context of the nearby two-to-four storey properties.

Sustainable modern construction

The new properties were built using a timber Structured Insulated Panels (SIPs) system. This sustainable modern method of construction involves creating the panels in factories and transporting them to the site to be assembled into rooms and buildings. The highly-controlled process ensures a consistent high quality of workmanship and also reduces the environmental impact of the construction, using less energy than traditional processes and minimising sound pollution and waste.

Regeneration of the area

The new residential development has improved and benefitted the neighbourhood, reinvigorating a previously disused site. The properties are split into two blocks, providing an active frontage to Commerell Place to the north.

Each new family home contains either three or four bedrooms and a private south-facing garden, as well as secure access to bin and cycle storage. Interiors are modern, spacious and bright, with large oriel windows providing plenty of natural light.

Additionally, there are private terraces to the rear at the upper levels, created by the step-down in the smaller properties and breaking up the block-like appearance along Commerell Place.

Reduced running costs for residents

As well as being offered for social rent, the new council homes employ a number of energy-saving technologies, designed to reduce the running costs to residents – an important consideration during the current cost of living crisis. These include: high efficiency air source heat pumps; MVHA providing fresh filtered air into the buildings while retaining energy; solar panels using natural sunlight to generate electricity; energy efficient LED lighting; high performance building fabric and triple glazing to prevent heat loss.

Thanks to the hard work of Elkins' team, work progressed smoothly and to schedule on the project. The new development was completed and handed over to the client in February 2023.

