



Two new apartments sustainably constructed using Structured Insulated Panels

Elkins' first SIPs project for Royal Borough of Greenwich involved the development of an existing site into a new residential development with two net zero carbon apartments, including one designed to be wheelchair-accessible.



Overview

Name: Green Way

Client: Royal Borough of Greenwich

Type: New build

Value: £0.75m



Scope

- Redevelopment of existing site
- Construction of two net zero carbon homes
- One-bedroom wheelchair-accessible ground floor apartment
- Two-bedroom first floor maisonette
- Compliant with part M4/3 and the Greenwich Wheelchair Site Brief 2012
- Sustainable construction method using structured insulated panels (SIPs)
- Construction of new boundary walls with railings
- Extensive hard and soft landscaping



Benefits

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

Net zero council housing

This project involved the redevelopment of an underutilised site in Greenwich into a new residential building as part of the council's Greenwich Builds programme. The development comprises two high quality council apartments, each with its own separate entrance and private garden. The ground floor property has one bedroom and is wheelchair-accessible, while the first-floor residence includes two bedrooms.



The latest renewable and energy-saving technologies have been employed throughout, ensuring both homes meet zero carbon emissions standards. This is not only beneficial to the environment, but also makes the properties cheaper to run for residents by reducing their energy costs.

The development utilises a considerate, modern design, with a restrained colour palette of materials that respond to and challenge the context of the Green Way location. Landscaping on the site includes raised shrubs and planters for accessibility and to provide privacy for residents along Westhorne Avenue.

Accessibility

The ground floor apartment is designed to be wheelchair-accessible, in line with the part M4/3 guidance and Greenwich Wheelchair Site Brief 2012. Due to the site being sloped, the design team worked hard to ensure the areas surrounding the property accommodate wheelchair users, allowing them to easily travel between parking spaces and their front door. The interior layout of the apartment has been carefully considered, with sufficient space for wheelchairs to navigate, as well as designated turning areas, storage and transfer spaces.

Structured Insulated Panels

Green Way marks the completion of Elkins' first development using structured insulated panels – a sustainable modern method of construction, which involves manufacturing panels in a factory and transporting them to site to be assembled into the finished buildings. The process offers a number of benefits compared to traditional construction methods, including, a lower environmental impact, improved insulation and weatherproofing, faster construction and more flexibility in design.

The SIPs construction process on this project required the use of mobile cranes over a six-week period, however, the size of the site left no space for such a set up. The Elkins team carried out extensive negotiations and communicated regularly with key stakeholders to ensure the works were completed to the scheduled programme.



