

# Modern methods of construction used to overcome logistical challenges on a complex site

OSBORNE



<b>PROJECT</b>	Great Eastern Buildings
<b>CUSTOMER</b>	London Borough of Hackney
<b>LOCATION</b>	Hackney
<b>CONTRACT</b>	Two stage design and build
<b>COMPLETION</b>	2017
<b>VALUE</b>	£6m

# Issue

The London Borough of Hackney required a new build residential development to provide private sale and shared ownership homes, in addition to office and retail space for the local community.

There were two key environmental and logistical issues that would impact on efficiency of the build programme as well as the local infrastructure:

- The homes had to include specific sustainability features to meet the Lifetime Homes, HCA, and London Housing Guide criteria.
- The site's challenging location near London Overground railway arches and between existing residential properties

# Solution

Technical design solutions were incorporated into the build programme, as well as into the design specifications

for the homes to address these key issues.

- Modern methods of construction were used with factory manufactured materials providing a more efficient build programme for the project, with benefits such as faster construction time, reduced noise pollution, and reduced site waste
- A mechanically fixed lintel system was used as the original brick clad concrete window lintels were too heavy for operatives to manually lift into place
- Specific technical features incorporated into the homes to meet specific design regulations and ensure increased energy efficiency for future homeowners included SUDS; photovoltaic panels; a CHP boiler; heat recovery ventilation system

A collaborative solution saw regular consultation with Network Rail to provide methodology statements and supplier information for the necessary technical sign-offs regarding works near the London Overground arches.

# Outcome

The project was successfully delivered on time and to budget. Specific sustainability features and an efficient build programme ensured that the criteria were met, with the use of offsite manufactured materials reducing site waste- contributing to a more economical build and ensuring lower energy costs for future homeowners.

