

Futuristic Homes, Historic Site



PROJECT	Little Kelham
CLIENT	CITU Developments
SCOPE	8 phases comprising variety of new, energy efficient homes.
LOCATION	Sheffield

"A true collaboration; combining vision, process and delivery. Innovaré have been an asset to our project team offering support and commitment at the right time in the right place. Citu have undertaken an innovative and unconventional route to housing delivery, and this has been simplified by Innovaré's approach and commitment to delivering an exemplar product using an inspiring timber frame solution."

Jonathan Wilson, Development Director, CITU

Flexible approach required to blend old with new

This mixed development of houses, apartment blocks, shops, cafés and social spaces had to meet challenging design criteria. In addition to being exceptionally sustainable and energy efficient ensuring they were in line with Passivhaus guidelines, the development on the site of a former steelworks needed to preserve reminders of Sheffield's industrial heritage. An innovative construction method and highly integrated design and build capability were essential to offer the architects the flexibility they needed.

Speed and predictability of build were also critical factors to simplify the scheduling of follow-on trades and accelerate the handover of completed dwellings.

Innovation without compromising economy delivered the ideal solution

The i-SIP Full Structure System combined with triple glazing was selected as the main fabric for the townhouses and apartment blocks. This combination allows energy efficient temperature regulation and fresh air all year round, resulting

in low running costs and a healthier, more sustainable living environment. The tight manufacturing tolerances of the i-SIP System allows an airtight structure to be created without additional onsite processes.

To maintain the industrial form of the site, the three-storey townhouses incorporated a complicated Saw Tooth Roof complete with the specialist Standing Seam finish. The design and manufacturing flexibility of the i-SIP System was ideally suited to this challenge, it also allowed for economic repetition of elements to contain costs, with different panel sizes, shapes and widths to create a truly bespoke project.

Innovaré's design team provided specialist knowledge on how to configure the i-SIP System to perform within Passivhaus guidelines without compromising the aesthetics. Shifting the loading into the floor zone and onto internal walls offers greater flexibility over the area and positioning of windows to optimise daylighting and thermal comfort. The i-SIP System also allows flexibility over the exterior finish. In this case brick and a white render were selected.

The Innovaré site team were able to create the structure for a dwelling a week, making it easy to programme following trades efficiently.

Cutting edge design and efficiency combined to deliver an exceptional built environment

Little Kelham has been named in the Sunday Times' 'Best Places to Live in the UK' guide and also appeared in a list of the '20 Hippest Places in the UK' in The Times. In 2016, it was named winner of the Residential category of the RICS Yorkshire & Humber Awards.

RICS judges praised the project team – comprising Citu Developments, Innovaré and appointed architects – for providing exceptional energy efficient homes, where residents can expect their energy bills and carbon emissions to be a fraction of a conventional property.

The new homes use only 10% of the energy that a standard building uses.