



CASE STUDY

COLLYHURST VILLAGE, MANCHESTER

Construction time halved for regeneration project with offsite steel frame solution.

Light-gauge steel frame (LGSF) from Intrastack, specified for the first phase of the Collyhurst Village regeneration project in Manchester, has helped main contractor, DEX Construction Group Limited, construct the first block of 55 apartments in just 16 weeks - approximately half the time associated with a traditional concrete structure.

Regeneration Project

Manchester City Council and Far East Consortium (FEC) are working together to regenerate a large area of Manchester, running north of the city centre along the River Irk Valley. Known as Victoria North, it is the largest renewal project Manchester has ever seen. The Collyhurst community is at the heart of this exciting project.

The initial design for this first phase, comprising circa 100 apartments over three 5 and 6 storey blocks, used a traditional steel structure, but as Simon Adams, Managing Director at DEX Construction Group explains, this posed several limitations:

"The sheer size of the steel beams required would have impacted on the ceiling height in each apartment, plus we knew we would need some additional design time to be confident that we could meet the required standards for acoustic and fire performance. We considered using a concrete frame, but that would have meant starting on the design phase again, adding additional cost and time into the build."

"It was at this stage that we approached Intrastack to explore the benefits that a light gauge steel frame could deliver."

Benefits of LGSF

This is the first time that DEX Construction Group had worked with an LGSF system, and it was important that the solution proposed was able to meet its expectations for speed of build, a reduction in groundworks and less waste, to name a few.

Danny Johnson, Head of Sales at Intrastack commented: *"A key benefit of Intrastack LGSF is the reduction in groundworks, with lower point loads meaning that shallower foundations can be dug, impacting positively on both build time and costs. In addition, all components are manufactured off-site in a controlled factory environment. This means that the steel sections are cut to size precisely and can be transported directly to site with fewer deliveries and less waste."*

"The next two blocks - block 2 and block SC are likely to be constructed during the winter months, but with so much of the preparation work able to be completed off-site, where the weather is not a contributory factor, we would expect to see a similar fast build time."



"Using these modern methods of construction also translates into a significantly safer working environment. With sections pre-cut to precise tolerances away from the hazards of the construction site, working at height can be reduced, also freeing up skilled on-site personnel for other duties."

A Complete Solution

As part of Saint-Gobain and its Off-Site Solutions division, Intrastack designed, manufactured & supplied the load-bearing structure, while sister companies, British Gypsum and Isover UK, supplied the system-tested and specified plasterboard, fire protection and insulation products for the site. This provided a seamless, end-to-end system, including full design, manufacture, and supply, with performance certification and warranties.



Simon Adams continues: *"Compared to a concrete structure, the cost benefits of building with LGSF really stack up. For example, a tower crane and driver would have to be scheduled to lift each concrete floor section into place, typically at a cost of up to £3,000 per week, with an estimate of three weeks build-time per floor. In contrast, it has taken just 16 weeks to build the structure using Intrastack LGSF."*

"This first phase of construction on the Collyhurst Village has gone to schedule, and our timescales have certainly been assisted greatly by the ease of working with Intrastack."

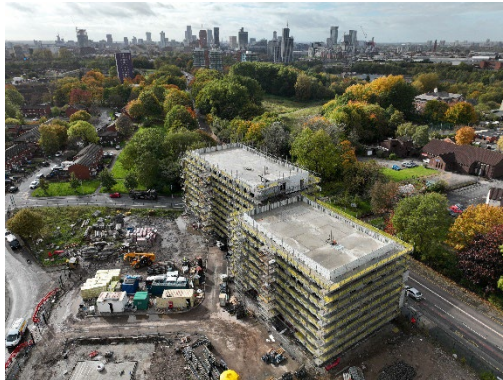
"We are likely to be working on this regeneration project for up to the next nine years and need supply chain partners that can help us to solve problems and be involved in the early stages of design. With the backing of the Saint-Gobain Group and the assurances that the system meets all required NHBC warranty and insurance approvals, Intrastack has quickly become a key partner to our business."

Danny Johnson concludes: *“The development of Collyhurst Village and South Collyhurst is built around a strategic regeneration plan, which places residents central to the decision making in how its community needs are met. A key part of this is to use local labour where feasible and a focus on building quality, affordable homes.*

Our Intrastack manufacturing facility is based just a few miles away in Chorley and our local team have fully embraced the ethos of the project, helping to provide a safe and welcoming community and homes for those most in need in the North-West.”

Project in Numbers:

- 16 weeks LGSF structure installation for block 1
- 3 blocks of apartments: 5 & 6 storeys
- 100 new flats made available
- 1st village of 7 planned



ABOUT INTRASTACK

Intrastack's panelised, steel-frame solution is leading the way in offsite construction techniques and bringing certainty to all areas of the project process. From the certainty of performance to certainty of costs, and with the certainty of quality and certainty of the building programme, by choosing Intrastack you can be certain of your project's success.

For more details on Intrastack, visit the website www.intrastack.co.uk or follow on LinkedIn at www.linkedin.com/company/intrastack/