

CELEBRATING
40
YEARS
OF INNOVATION

OFFSITE CONSTRUCTION LEADS TO FASTER BUILD FOR INTELLIGENT STEEL

Long-standing Howick customer Intelligent Steel recently partnered with Ashcourt Contracts to deliver 239 units of student accommodation over 9-stories in the centre of Leeds in the UK. The design, manufacturing and installation of the 6000m² load-bearing light steel framing included in the project took nearly half the time budgeted and proved without a doubt the undeniable speed and accuracy of light gauge steel roll forming with Howick's FRAMA machines.

The project is a perfect demonstration of how modern methods of construction, coupled with the incredible material properties of light gauge steel can drastically speed up the construction process – without sacrifice to health, safety or quality. Most of the superstructure's work content was completed before the team ever set foot onsite. While the site is being prepared and podium levels are constructed, the team at Intelligent Steel completed the roll forming and assembly of the walls and floors ready for erection as soon as the slab was ready. This means much of the work is taken off the critical path, allowing the building to be erected in an incredibly short onsite timeframe.



"We had very early involvement in the design of the building, but manufacturing and installation took just 16-weeks. The on-site erection of the offsite manufactured light steel wall panels (with factory installed weather defence board) and floor cassettes (with factory installed steel decking) was completed 14-weeks ahead of the original 30-week target installation program."

Andrew Turnbull, CEO of Intelligent Steel

CONSTRUCTION CONTINUES WHATEVER THE WEATHER

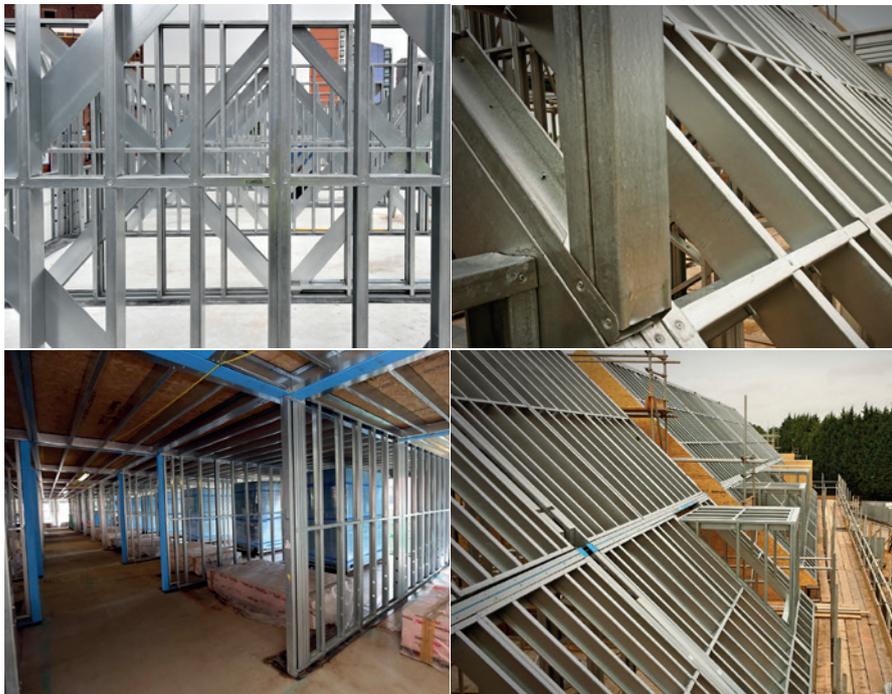
The speed of the Intelligent Steel installation and ability to reduce the critical path meant the project was delivered 50% faster than would be possible with traditional methods. Added to this, round-the-clock manufacturing provided program certainty not seen by their client on similar schemes. Beyond this, the fact that Intelligent Steel can be installed in wet and inclement conditions enabled further program acceleration and certainty.



QUALITY CONTROL

By using light gauge steel as the main building material, Intelligent Steel was able to offer a solution that not only benefited from the use of offsite manufacturing, but benefited from the mechanical and material properties of the steel itself. The lightweight galvanised steel used, not only provides a much lighter solution, helping reduce the cost of foundations, but it provides an incredibly high level of predictability.

Each stage of the project was measured and controlled to ISO standards, with every steel frame uniquely labelled with frame number, weight and GA site references. Intelligent Steel use manufacturing philosophies and state-of-the-art machinery supplied by Howick Ltd, together with design software, Tekla Structures, to ensure every steel component produced exactly matches the approved design. Further to this, each component is produced to be self-jigging for accurate and fast assembly within the factory, further assuring quality at every step of the process.



“The project success was due in part to the FRAMA 5600 units supplied by Howick Ltd in New Zealand. Using this machinery has changed the way we approach construction builds, and the results speak for themselves. Intelligent Steel will continue to adopt new technology in the construction process to build faster and smarter, and we look forward to Howick Ltd helping us to achieve these goals.” *Andrew Turnbull*



HOWICK
INNOVATION... READY TO ROLL

ABOUT HOWICK LTD

Established in 1978, Howick is a world leader in developing, building and manufacturing roll forming equipment for the construction of light gauge steel framing structures. Howick is dedicated to engineering excellence, and has gained a global reputation for innovation and unparalleled reliability.

Trusted worldwide, Howick has a network of highly skilled representatives on four continents, and machines operating in over 70 countries around the globe. Wherever in the world you do business, Howick can meet your challenges with timely, expert resolutions.

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