

INTRASTACK

CREATING CERTAINTY AT THE CORE OF ANY STEEL FRAME PROJECT.

Light gauge steel construction can deliver fast, adaptable and cost-effective buildings to multiple storey heights. The Intrastack system is designed to further enhance these strengths through the application of off-site manufacturing principles.

By implementing Intrastack, the on-site labour requirement and build-programme is dramatically reduced, alongside improvements in quality, health & safety, and overall site-productivity.

KEY BENEFITS OF LGSF TECHNOLOGIES



Design Flexibility

Intrastack, pre-panellised structures enable a high level of design flexibility. Our LGSF construction kit-of-parts, combined with our forward-thinking approach to structural design, provides maximum flexibility to meet almost all building typologies and floorplans.



Safety

When using pre-panellised LGSF structures the HSE states that site safety is improved by a factor of 5 through the reduction in site labour, reduced working-at-height, less waste on site (trip hazards).



Quality & Accuracy of Build

The accuracy and precision of LGSF technology (up to 1mm per structural storey height), allows for a more exacting interface with finishing systems, leading to higher levels of quality & performance.



Increased Productivity

An Intrastack framed building can be constructed up to 50% faster than a traditional structure, leading to reduced site preliminaries, reduced plant costs, and an earlier ROI.



Life Span

The NHBC and other housing warrantee providers accept LGSF structures as having a life span in excess of 60 years, however the predicted life span of a steel framed building with warm wall construction is over 250 years.



Dimensional Stability

LGSF construction is a dry process eliminating shrinkage after construction, steel sections do not suffer from creep, shrinkage or warping under load.



Reduced Carbon Footprint

Considerable reduction in production of onsite waste material, and up to 20% reduction in embodied carbon in building fabric.*



Construction Predictability

Due to the nature of offsite construction, LGSF is less reliant on site and weather conditions, along with the usual 'wet-trade' labour resources.



Speed of Construction

Intrastack, pre-panellised structures can improve the overall construction programme by 50%, providing a much quicker ROI for your project.



Fire Protection & Performance

Unlike timber frame, during construction of steel frame structures, fire protection is not required. Intrastack LGSF structures can offer up to 120 min fire performance based on our tested configurations.



Weight Reduction

A lightweight steel frame structure can be up to 70% lighter than a traditional structure, resulting in lighter and cheaper foundations and podium structures.



System Robustness

Intrastack structures offer the option of a composite concrete floor, delivering a quality under foot feel to all levels of the building. We can also provide acoustic and durability upgrade options to all structural walls beyond regulatory performance.

*For more information on this please refer to third party studies (ED020/ RT1730) conducted by The SCI (The Steel Construction Institute). Reductions will vary by project, based on a number of variables. The % difference will depend on the proposed project specification and build approach. Comparisons will vary depending on specific comparison details and lifecycle stages.

