

Montacute Yards, London

PROJECT TEAM

Architect: **Allford Hall Monaghan Morris**

Structural Engineer: **Heyne Tillett Steel**

Main Contractor: **ISG Limited**

Client: **Brockton Everlast**



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Located in central London, Montacute Yards celebrates the industrial heritage of the area through the creation of a new type of warehouse. Conceived around generous volumes and a legibility of making – from its steel exoskeleton to the finishes within – the project creates two new flexible office and retail buildings with a glazed connection. The refurbishment of a Grade II listed Georgian townhouse and a new two-storey warehouse, complete the development.

The scheme transforms the tight, brownfield site integrating the buildings into the wider public realm, with an external courtyard linking Shoreditch High Street and Anning Street and creating a new landscaped market area beneath the viaduct.

The desire to expose the structure was at the heart of the architect's design for the development, which has been articulated through the external and internal exposure of the steel frame. A steel-framed solution was chosen as it allowed the industrial architectural vision to be achieved whilst using a cost-effective, fast and relatively lightweight form of construction that suited the heavily constrained site with limited loading space.

The integration of the structure and services to meet architectural requirements was coordinated through the BIM process, which was also used to carry out clash detection and conduct virtual walk rounds throughout the design phase. This continued into fabrication, when the steelwork supply chain developed their own models using this to check for any discrepancies and inspect the connections. At the point of completion, the combined model was handed over to the client and forms part of the as-built model hosted on digital platform Twin View.

The external steelwork introduces complications with thermal expansion and contraction with changing weather. Rather than resisting such movements by designing the primary structural members for the residual internal stresses that develop, the solution on Montacute Yards was to introduce movement joints into the external steel frame to allow the expansion and contraction to occur. The result is an external steel frame with members sized appropriately for their function, and a structure which can adapt to changes in external temperature.

The office floors are designed for a higher imposed load than required by standard BCO (British Council for Offices) guidelines. This has a marginal effect on the steel sizes, but provides flexibility for the future, allowing the building to be re-purposed for other uses. This, coupled with the efficient use of the space and maximised massing on the irregular site, should maximise the longevity of the building.

Judges' comment

An ingenious backyard development on a severely constrained unpromising site which draws upon the industrial heritage of the area. The legibility of structure leaves one in no doubt that this is a steel building. Together, base building and fit out combine seamlessly to create a well-considered, flexible and attractive project.