



Sky Studios Elstree Borehamwood

Location

Borehamwood

Client

Sky Legal & General

Main Contractor

Bam Construction

Architect

UMC Architects

Engineer

Fairhurst

Tonnage

6,500 tonnes

Completion date

Spring 2023

Sky Studios Elstree is a state-of-the-art film and TV studio, just outside of London in Hertfordshire. When the project was under construction, Severfield played a crucial role in this project by supplying 6,500 tonnes of structural steelwork, which included the construction of multiple soundstages, two production suites, and five office blocks.

From the outset, the project focused on sustainability and innovation. Understanding Sky's operational needs was key to its success, helping us develop structural solutions that met both acoustic performance standards and allowed flexibility in how the spaces were configured.

Steel was chosen for its suitability due to the project's fast-track requirements. It allowed for quick erection and over-cladding, making the buildings watertight so that internal acoustic treatments and service installations could begin.

The Sound Stage design aimed to use space efficiently. Demountable division walls were installed between adjacent stages, and all column supports for clear-span trusses were placed within the building's external walls. This consistent wall construction depth reduced unnecessary material use and optimised column grids and building proportions.

Clear internal heights and the use of suspended production services were critical in the Sound Stage area. The structural solutions included a framework for runway beams and gantries for rigging equipment, along with provisions for ventilation and ductwork to manage smoke from pyrotechnics.

In the production office blocks (POBs), we focused on the design of the shared party wall with the Sound Stages. A single line of steel columns supported both the Sound Stage trusses and the office floors, minimising the thickness of the party wall. This maximised the usable floor area, providing hundreds of square meters that would otherwise have been lost.

Throughout the project, Severfield collaborated closely with the design team to optimise the floor slab spans, column grid, and steel section sizes. This led to opportunities to clear-span some office footprints and further reduce material use.



Sky Studios Elstree Borehamwood

Location

Borehamwood

Client

Sky Legal & General

Main Contractor

Bam Construction

Architect

UMC Architects

Engineer

Fairhurst

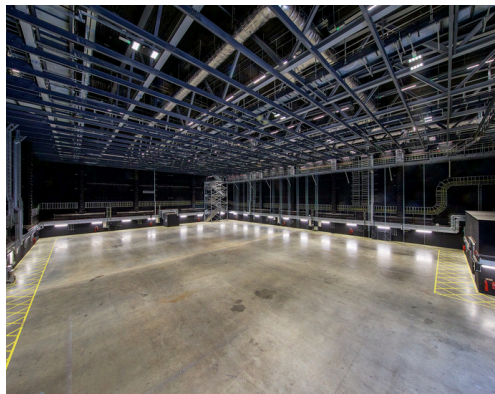
Tonnage

6,500 tonnes

Completion date

Spring 2023

The two production suites are built using a traditional portal frame structure, each featuring a mezzanine floor at six meters above ground level. The structural design provided a ground floor plan with minimal columns, allowing for future division of the space into multiple production areas and enabling large vehicles to access the site for secure material deliveries.



The Sky Studios Elstree project showcases Severfield's commitment to delivering innovative and sustainable solutions in construction. By understanding and anticipating our clients' needs, we continue to push the boundaries of what is possible in structural engineering.