## Commendation

## 101 Moorgate, London

**PROJECT TEAM** 

Architect:
Orms

Structural Engineer: Waterman Group

Steelwork Contractor: **BHC Limited** 

Main Contractor: **Mace Group** 

Client: **Aviva Investors** 

## Judges' comment

This is a very well executed project providing ten-storeys of over-station development above Moorgate station with all the complexities of transfer structures and acoustic isolation to be expected without compromising sustainable accreditation. Of particular delight was the double height atrium where the storey high exposed trusses were a true celebration of steel.



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101 Moorgate is a ten-storey steel-framed commercial and retail development located above Moorgate Station in London's financial district. Designed as an over-station structure, it delivers 70,000 sqft of Grade A office space and 2,700 sqft of retail, integrating seamlessly with the city's transport infrastructure while setting new standards in sustainability and urban design.

The building's steel frame spans directly above the ventilation and access shafts of the Elizabeth Line and the Metropolitan Line tunnels, requiring innovative engineering solutions. Two 60 tonne steel trusses were chosen and installed for their efficiency in spanning four tube lines, forming the double-height atrium entrance. These trusses were fabricated in smaller sections due to crane limitations and site-welded to achieve a seamless finish. Supporting the outer columns and façade, exposed tension rods with 180mm pins were installed using bespoke cradles and jacks. These dog bones have become architectural features within the building, while providing essential structural support for the perimeter of the building.

Acoustic isolation was critical, with elastomeric bearings used at all structural connections to prevent vibration transfer from the station below. The superstructure features lightweight composite slabs with shallow beams and reinforced lightweight concrete, reducing embodied carbon and meeting strict loading criteria.



Off-site construction methods, including precast concrete panels with integrated glazing, further reduced waste and energy use.

Logistics posed significant challenges due to the constrained city-centre site and proximity to Moorgate Station. The team used a phased erection strategy, splitting floorplates and sequencing installation to maintain laydown areas and minimise disruption. Collaboration with Network Rail and Transport for London ensured safety and compliance throughout. The project's delivery was recognised with multiple accolades for traffic and logistics management.

Sustainability was central to the project's vision. The building is fully electric, powered by air-source heat pumps and photovoltaic panels. Over 4,200 sqft of external terraces enhance biodiversity and occupant wellbeing. These features contribute to the project's pursuit of BREEAM 'Outstanding' and WELL Platinum certifications.

101 Moorgate exemplifies how structural steel can enable complex urban developments that are both technically ambitious and environmentally responsible. Through collaborative design, engineering excellence, and a commitment to sustainability, the project has transformed a challenging site into a high-performance, people-focused space that enhances the city and community.