



## Arbor

### Bankside Yards, London

**Location**  
London

**Client**  
Native Land

**Main contractor**  
Multiplex

**Engineer**  
PLP

**Architect**  
AKT Engineering

**Tonnage**  
3,450

**The Bankside Yards development on the south bank of the river Thames will combine historic elements with modern designs in order to create spaces for commercial, residential, retail and wellbeing use - along with a 5\* urban resort hotel. Its prime location means commuters will have easy access - whether that's by train, tube, bus, boat, bike or foot.**

The overall development will comprise of eight buildings - the highest being 50 storeys, and they will all sit above the existing arches that are along the walkway from the Royal Festival Hall to the Tate Modern.

Bankside Yard Building 3, now known as Arbor, is an 18-storey office block which is situated right next to Blackfriars Bridge and will stand 75 metres tall when completed.

Something that makes this project slightly different is that it has a Vierendeel sway frame, with 22-tonne columns supporting the structure from the ground to level three of the building. Where we would usually have the centre of mass in the middle of such a building, this was not possible due to the project having so many existing structures around it, hence the requirement for such a unique frame. A Vierendeel frame means steelwork is mostly constructed through rectangular, rather than triangular, trusses - this making the frame less prone to bending or swaying.

The striking unique design of the building and site constraints presented many challenges – the safe delivery and installation of the 22-tonne columns being one of the biggest feats. The columns were delivered under and through Blackfriars Network Rail Viaduct – which meant careful consideration of the active train line and having to collaborate closely with Network Rail.

The cooperation across all our departments at each stage of the project has helped us achieve the safe and efficient delivery of our services and steelwork for the project – right from design through to the site team constructing the steelwork.