

# Strata, Elephant & Castle, London



Strata, a 147-meter tall residential tower in the centre of London, is the flagship focal point of the £1.5 billion, 170-acre regeneration programme for Elephant and Castle.

CCL (GB) is providing design, supply and installation of CCL's new flat slab bonded system for the tower.

With its innovative curved, aerodynamic design, Strata's unique feature will be its three wind turbines, each nine metres in diameter, integrated into the top 20 metres of the tower giving the structure its own self-contained wind farm. The tower will consist of 399 new apartments over 43 storeys offering long-range views across the City.

Brookfield, owners of the site, awarded the construction to Buildstone, who commissioned CCL to deliver the post-tensioning element. Due to the high profile of the development, the project was tendered by most post-tensioning companies in the UK.

However, CCL won the contract based on our global experience, ability to create bespoke systems and highly productive relationship with Brookfield.

The design objective for the tower was to achieve a flat soffit within the tight floor-to-floor heights while maintaining a minimal floor thickness. The use of post-tensioned slabs allowed a minimal slab thickness of 200mm throughout. This would be impossible using traditional RC construction. The use of CCL post-tensioning dramatically reduces the cost of the formwork and increases speed of construction for the tower, which was built at one floor per week.

The curved design of the floors created further challenges which CCL were able to meet by utilising the full range of anchorage sizes within the floors. Strata was the first UK project to use the CCL 'X' range of anchorages which were developed to exceed the requirements of BS EN 13391 and ETAG 013.

CCL Client:  
Buildstone Construction

Date:  
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Consultant / Architect:  
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