



Slabstress

Battersea Place, Luxury Retirement Apartments

Client

Life Care Residences Limited

Engineer

Pell Frischman

Principal Contractor

Vinci Construction

Post-tensioning Contractor

Freyssinet Ltd

Works Completed

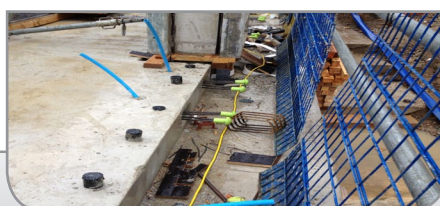
December 2014

Battersea Place is London's first luxury retirement village. Located on Albert Bridge Road and overlooking Battersea Park, the project provides 128 one and two-bedroom apartments complete with nursing facilities, pool, gym and restaurant. The development provides independent living with integrated healthcare and a full social agenda for the growing band of wealthy retirees. Penthouse apartments sell for £2.5M each.

Vinci Construction selected post-tensioned floor slabs for economy. In total 12,005m² of suspended PT slabs were used from ground level up to ninth floor. The ground level slabs were temporarily isolated from the capping beam at the top of the contiguous piled retaining wall by dowels which were grouted up 28 days after stressing the slab.

Typical floor slabs are 200mm thick but block A ninth floor and block B sixth floor are transfer slabs supporting the inset steel upper storeys on 250mm thick slabs. Spans are typically 7.2m but they do reach 9.8m in occasional locations meaning the slab is working hard in some places. External steel balconies are fixed to the slab via cast-in Schoeck connectors which form the thermal break.

The design reduces CO₂ emissions in use by up to 21% through measures such as optimised glazing to improve day lighting and reduce overheating, along with utilising the thermal mass of the concrete frame, cooling with heat recovery and low energy lighting. The £30M development opened in 2015.



Freyssinet Ltd. Innovation House, Euston Way, Town Centre, Telford, Shropshire, TF3 4LT
Phone +44 (0) 1952 201901 Fax +44 (0) 1952 201753 Email info@freyssinet.co.uk