



Case Study



Beaumont Court and
Richmond House



Beaumont Court and Richmond House

Client: Randall Watts

Contractor: Base Quantum

Architect: Campbell Reith

Location: Southend, London

Balconies: 139 Cassettes®



Challenge

The main challenge with this project was that it was the renovation of an existing building, meaning anchors couldn't be cast-into the slab. The team had to find a way to secure the balconies to the building and achieve a high level of rigidity while not knowing the exact strength of the existing floor substrate of a long-term derelict building.

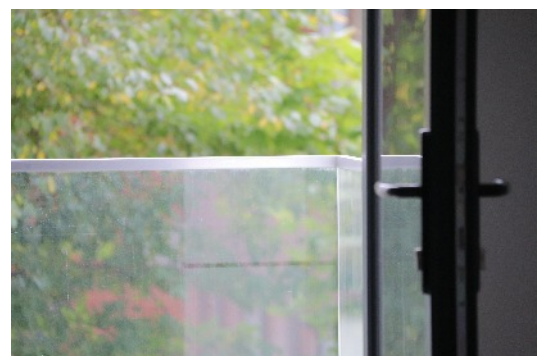


Solution

To overcome the challenges posed by the existing slab we worked with the site and engineers to design a unique anchor and tie wire system to suit the needs of the project.

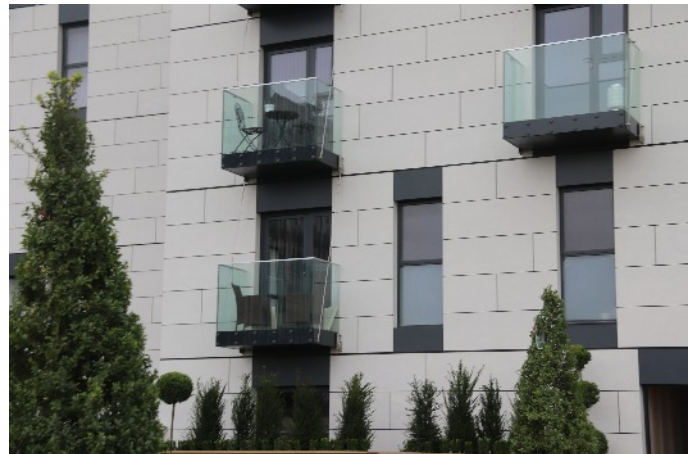
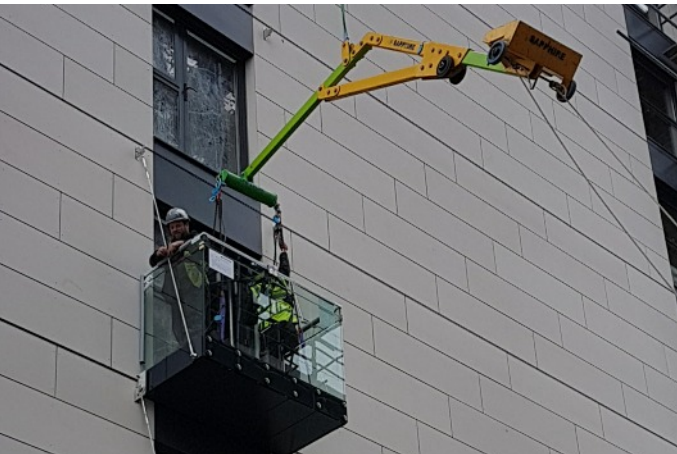
Considering the existing structure, the size and weight of the balconies a bottom bracket was fixed to hold the balconies with tie wires for the below balconies restraining from the same brackets.

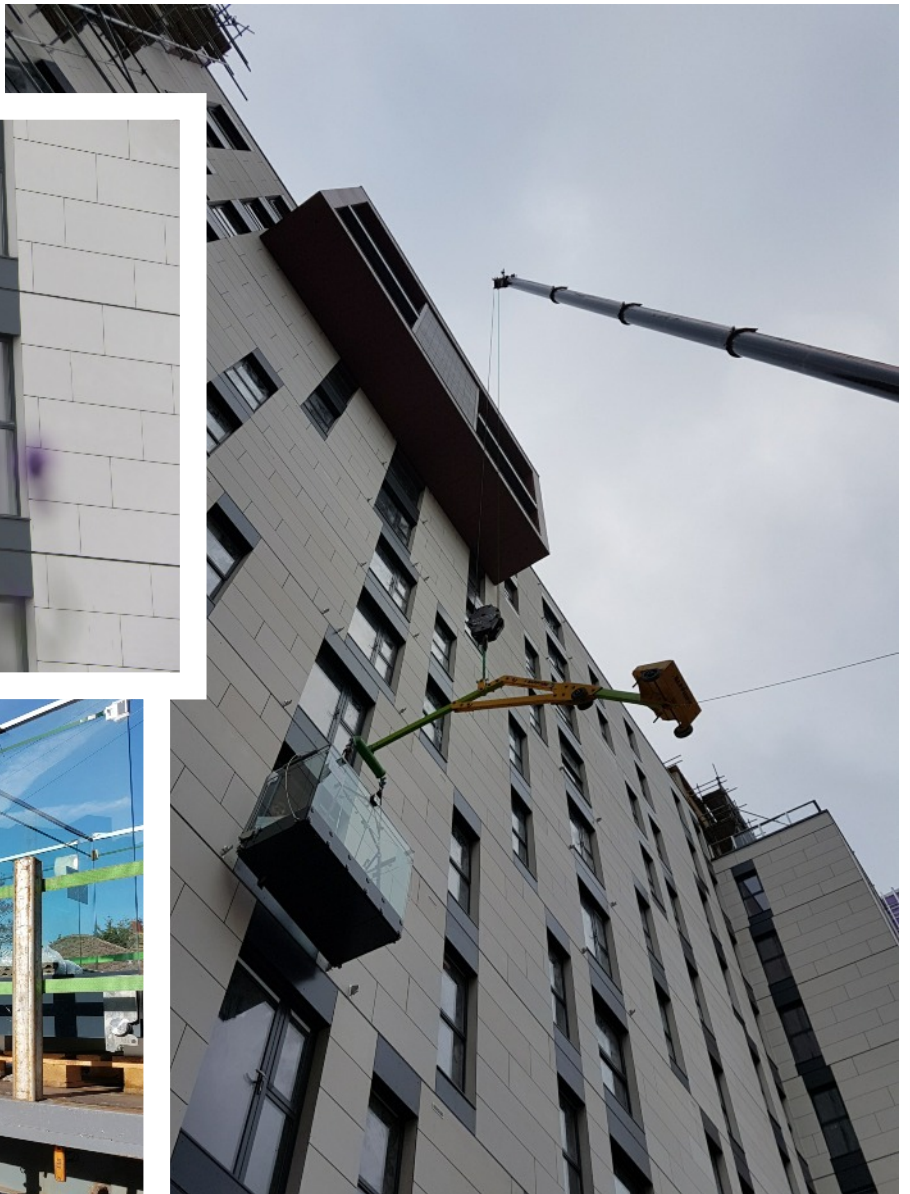
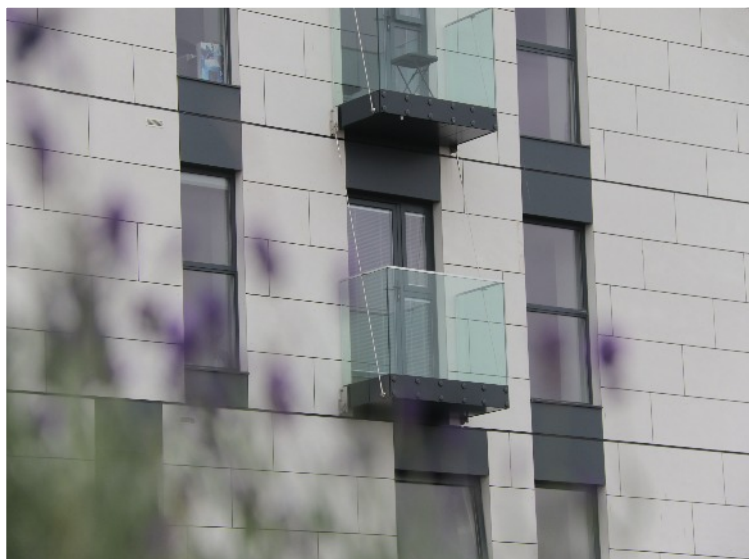
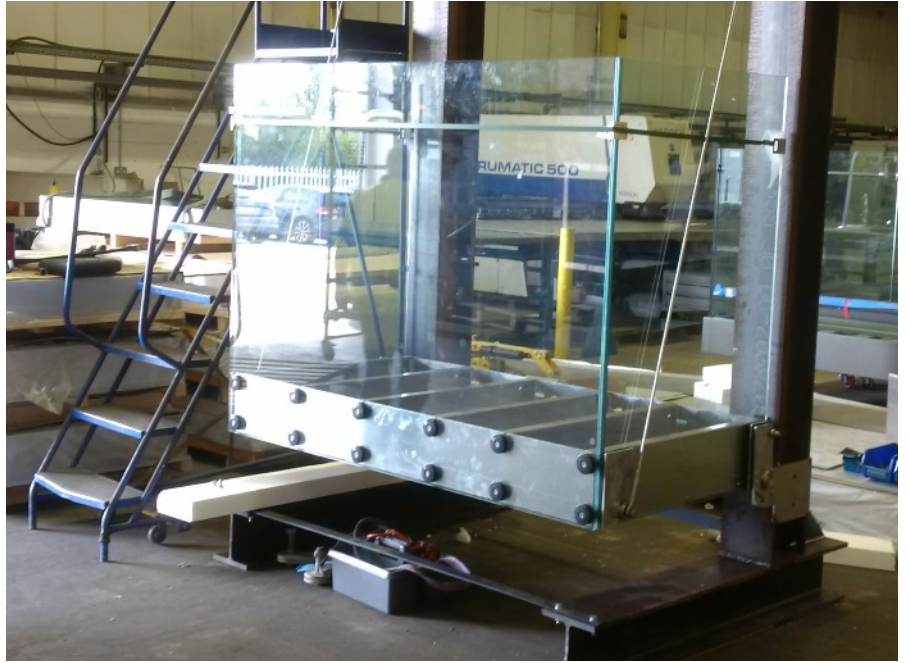
Tie wires securely cantilever the balcony off the building while giving a unique aesthetic finish. This meant the balconies were safely secured to the building slab for taking momentum forces like a traditional bolt-on/Glide-On™ approach.



Rigid.Ready.Right.

- Step 1** Unique two-part brackets were secured to the concrete frame.
- Step 2** Cassette® balconies were preassembled offsite, including the balustrades, decking & soffits.
- Step 3** Use of counterbalance lifters was important to install balconies below feature 'boxes' higher up the building.
- Step 4** Once lifted into position, the balconies fixed onto the awaiting bottom brackets and were secured above with the tie wires.





NBS Specification

Project Name

Manufacturer	Sapphire Balconies Ltd 11 Arkwright Road Reading RG2 0LU 0844 88 00 553 sales@sapphire.eu.com www.sapphire.eu.com
Reference	Glide-On™ aluminium Cassette® balconies with Crystal® frameless, structural glass.
Balcony anchor	Bespoke fixing bracket fixed to existing slab, bracket to receive balcony at bottom and provide fixing point for tie wire restraints.
Arms	Tie rods used in place of arms with a small bracket attaching the Cassette® to the façade
Cassette® structure	Standard 400mm modular Glide-On™ Cassette® balconies
Soffits	Polyester powder coated aluminium integral controlled draining soffit.
Deck finish	Enjura WPC composite decking fixed with hidden clips.
Toprail	22 x 22mm (nominal) 'U' shaped satin anodised aluminium capping to top of glass.
Guarding	8+8mm Clear toughened PVB laminated glass to meet 0.74kN/m loading with screen-printed obscure band to conceal balcony frame
Base fixing	Mechanically fixed to Cassette®
Fascias	Polyester powder coated aluminium to conceal edge of balcony frame.





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All facts have been carefully collated and were accurate when researched; these may become out of date. Sapphire takes no responsibility for this. MD141019MM

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