



New Writtle Street, Chelmsford

Client: Essex County Cricket Club/Midland & City Developments Limited

Contractor: Kier Construction

Location: Chelmsford, Essex

Balconies: 48 Cassettes® and roof terrace balustrades

Value: £240k



Challenge

New Writtle Street was the first phase of a residential development at Essex County Cricket Club. The customer required small balconies and roof terrace balustrades that were also cost effective. They didn't want to use the brand of cast-in brackets originally specified due to the higher cost, the deflection it allowed, and lack of design flexibility. Furthermore, the building's façade was installed using mast climbers which required a different approach to the balcony bracket design and installation sequence.



Solution

Sapphire developed a bespoke, more rigid anchor as an alternative to the other cast-in brackets that the customer felt were unsuitable. Sapphire used a number of methods to achieve the cost-effectiveness required by the customer. These included, a printed trim fascia, and a closed Cassette® was used for a small depth of balcony, which also enabled less materials and assembly costs. To overcome any issues brought about by the mast climbers, two-piece arms were chosen allowing the stubs to be connected first. Then, as the mast climbers were finished higher up, the arms were connected, removing the risk of any potential conflicts between balcony connections and mast climbers. The benefits of Glide-On™ Cassette® balconies were demonstrated with a record number produced in a single day, followed by the installation of 36 balconies in just 10 hours.



Installation process

Step 1

A bespoke version of Sapphire's cast-in anchors was used after inhouse testing. Stub brackets were used from the thermal break within the cavity, to the outside of the finished façade.

Step 2

Lean management of the off-site production at Sapphire's Reading factory, enabled a record number of balcony Cassettes® to be assembled in a single day.

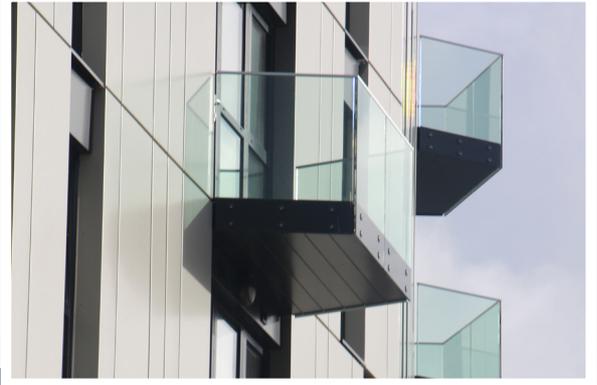
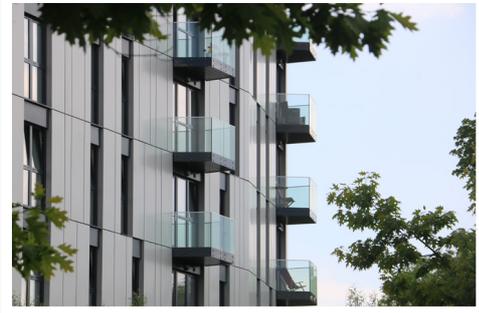
Step 3

With the factory finished Cassette® balconies stored in Reading, When required, Sapphire produced a very efficient lorry loading plan to enable just three lorries to transport the 48 balconies reducing carbon footprint and saving money.

Step 4

After the final section of the Glide-On™ connection was installed after the mast climbers completed the higher level façades.





NBS Specification

New Writtle Street, Chelmsford

Manufacturer	Sapphire Balustrades 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	Sapphire cast-in anchor, pre-assembled with thermal breaks.
Arms	Two piece galvanised steel stubs and arms, with arms fitted at a later date.
Cassette® structure	Extra slim Glide-On™ closed Cassette® balconies
Soffits	Polyester powder coated aluminium closed Cassette® to Ral 7043 matt, free draining to sides of balcony.
Deck finish	WPC composite decking fixed with hidden clips. Colour S8 with PO2 grain finish.
Toprail	Square satin polished stainless steel capping fixed on top of glass.
Guarding	10+10mm thick clear toughened Crystal® structural glass panels laminated together with a clear 1.5mm PVB interlayer.
Base fixing	Mechanically fixed to Cassette® using bobbin point fixings.
Fascias	Ceramic screen printed band fascia band on glass, with matching polyester powder coated aluminium discs to Ral 7043 matt.

