

DS/DS/MS05127

Winnals Park Haywards Heath Residents Company Limited
Winnals Park
Paddockhall Road
Haywards Heath
West Sussex
RH16 1FH

17th October 2024

Dear Sirs,

**Structural Inspection of balcony balustrades on Chaucer & Byron Court buildings,
Winnals Park, Haywards Heath**

Further to our site visit on Thursday 12th September 2024, we report as follows:

1. INSTRUCTIONS

- 1.1 Instructions were received from Winnals Park Haywards Heath Residents Company Limited, the current freeholders, to carry out a limited non-intrusive structural inspection of the 6 typical balcony balustrades for the properties in Chaucer Court and Byron Court three storey apartment blocks.
- 1.2 The Client's attention is drawn to the rear of this report for the Conditions & Limitations.
- 1.3 Report is to be read in conjunction with the attached photos.

2. INSPECTION

- 2.1 The inspection was carried out by David Simmonds BEng (Hons) CEng MICE during the morning of Thursday 12th September 2024. Access was gained internally to 6 flats to review the external balcony balustrades.
- 2.2 At the time of the inspection the weather was cool and sunny.

3. GENERAL DESCRIPTION

- 3.1 There were 4 blocks with 6 apartments in each block– two blocks for Chaucer Court and two blocks for Byron Court. All apartments (including the ground floor apartments) had an external balcony with similar style balcony balustrades. See photos 1-4 indicating the apartment numbers for each block. We carried out inspections on 6 apartments to give a spread of the condition of the balcony balustrades on different levels on different blocks. Chaucer apartments 4, 9 & 10 and Byron apartments 5, 8 & 12.

4. OBSERVATIONS

General

- 4.1 The balcony balustrades spanned across the width of the balconies (approximately 2.7m) and returned on the sides to be fixed to the side return masonry of the balconies. The balconies were recessed into the buildings with a projection of approximately 230-300mm at the front (approximately 230mm at the base of the handrail and 300mm at the top of the handrail – balcony balustrades were leaning out by design)
- 4.2 All of the balcony balustrades were formed with steelwork frames with a timber handrail and a partial infill boarding panel. The handrail steel frame was formed with a 25mm wide x approximately 5mm thick flat plate for the bottom rail directly against the concrete paving slab balcony floor. We believe the bottom rail had locating pins welded to the underside set into the concrete. Vertically the handrail typically had 9No. 20 x 20 square steel bars running from the bottom rail to a similar upper rail of 25 x 5mm thick steel flat plate fixed to the underside of the timber handrail. The timber handrail was approximately 145mm high and 60mm wide.
- 4.3 The front elevation of the handrail had 5 steel bars evenly spaced on one side and 2 bars set approximately 1m apart behind an infill boarding panel which was approximately 1675mm long and 530mm high, see attached photos. The other two 20 x 20 bars were located on the side returns. The spacings between the bars was generally 130mm along the front face and around 150mm across the corners. Around the infill boarding panels the gaps varied between 60-180mm.
- 4.4 Below we have noted the variances between each balcony handrail and any defects noted.

Chaucer Court flat 4 (Photos 5-9)

- 4.5 This was a first floor apartment and on this balcony the infill boarding panel appeared to be some form of fibre cement boarding approximately 6mm thick fixed with screws running into the 20 x 20mm steel posts.
- 4.6 The bottom rail of the balcony could be laterally moved and appeared to have lost it's fixing along the bottom edge.
- 4.7 There was some slight corrosion noted on the ends of the bottom rail and some flaking paint to the upright bars.
- 4.8 Height from floor to the top of the handrail was approximately 885mm.

Chaucer Court flat 9 (Photos 10-14)

- 4.9 This was a first floor level apartment and the infill boarding was approximately 12mm thick plywood. The plywood boarding was fixed with approximately 5mm diameter bolts through the 20 x 20 steel posts.
- 4.10 An extra 20 x 20mm steel vertical post had been welded between the upper and low rails to the east side of the infill boarding.
- 4.11 The timber handrail had a steel bracket fixed on the inside face between the front face and east side return.
- 4.12 There was some slight corrosion noted on the ends of the bottom rail and some flaking paint to the upright bars.
- 4.13 Height from floor to the top of the handrail was approximately 880mm.

Chaucer Court flat 10 (Photos 15-19)

4.14 This was a first floor level apartment and the infill boarding was approximately 10mm thick ply which was delaminating particularly on the corners. Boarding was fixed with approximately 5mm diameter bolts through the 20 x 20 steel posts.

4.15 There was some slight corrosion noted on the ends of the bottom rail and some flaking paint to the upright bars.

4.16 Height from floor to the top of the handrail was approximately 885mm.

Byron Court flat 5 (Photos 20-24)

4.17 This was a second floor level apartment and the infill boarding was approximately 8mm thick plywood. Boarding was fixed with screw fixings into the 20 x 20 steel posts. The paint was flaking off the boarding.

4.18 There was some corrosion and delamination noted on the ends of the bottom rail and some flaking paint to the upright bars.

4.19 There was a gap between the bottom rail and the paving slabs.

4.20 Height from floor to the top of the handrail was approximately 895mm.

Byron Court flat 8 (Photos 25-29)

4.21 This was a ground floor level apartment and the infill boarding was fibre cement boarding approximately 6mm thick. Boarding was fixed with screw fixings into the 20 x 20 steel posts.

4.22 There was some corrosion noted on the ends of the bottom rail and some flaking paint to the upright bars.

4.23 There was a gap between the bottom rail and the paving slabs and screw fixing between the bottom rail running into the paving slabs under.

4.24 Height from floor to the top of the handrail was approximately 895mm.

Byron Court flat 12 (Photos 30-34)

4.25 This was a second floor level apartment and the infill boarding was approximately 8mm thick plywood. Boarding was fixed with screw fixings into the 20 x 20 steel posts. The paint was flaking off the boarding.

4.26 There was some corrosion noted on the ends of the bottom rail and some flaking paint to the upright bars. There was some delamination to the bottom rail midway along the front of the balcony and a gap under the bottom rail. The paving slab in the location of the rusting bottom rail had cracked.

4.27 Height from floor to the top of the handrail was approximately 905mm.

5. ADDITIONAL INFORMATION

5.1 On a general inspection of the site, we understand concern has been raised, by John Wade of Grumitt Wade Mason, on the overall safety of the balcony balustrades, irrespective of current guidance.

6. CONCLUSIONS AND RECOMMENDATIONS

6.1 The infill panels for the balcony balustrades are a mixture of plywood and fibre cement boards, the plyboard thickness varied from 8-12mm thickness whereas the cement board was approximately 6mm thick. It is likely that all boards were a fibre cement board originally, as the fixing for the plywood panels looked to be replacement through bolt fixings as opposed to tapped screw fixing present on the cement board panels. This is probably due to the original boards have broken in

the past. All of the boards, both plyboard and cement board, significantly flex when leaning on the end sections, which cantilever past the fixing locations by around 300mm. **We would not be able to justify these boards for the required British Standard lateral load to infill panels of 1kN/m² spread load or 0.5kN point load.**

- 6.2 The base fixings to the handrail looked to be a location pin into the concrete paving balcony floor, this appeared to have corroded away on several of the balconies, as the base of the handrail could be moved laterally.
- 6.3 Corrosion was noted to the bottom rail on several balconies.
- 6.4 The height of the balcony balustrades on the balconies varied between 880-905mm, so all of the balcony balustrades are too low compared with current guidance of 1100mm.
- 6.5 We also noted that the gaps between handrail vertical posts and around the boarding infill panels were in excess of the current recommend maximum gap of 100mm which relates to child safety.
- 6.6 Our survey reviewed 6 of the 24 balcony balustrades to Byron & Chaucer Courts but this sample of balconies seems to be a good representation of the issues with the balcony balustrades to all of the apartments. Given the condition of the existing balcony balustrades and their lack of compliance to safety standards, we would recommend your early consideration that the balcony balustrades are replaced with compliant balcony balustrades. The balcony balustrades design is likely to require planning permission, as it would impact on the external look of the buildings. Architectural advice would be required for the planning application and to ensure compliance with the relevant British Standards and Building Regulation requirements.

We hope the above and attached are clear and meets with your approval. If you have any queries or wish to discuss any of the points raised then please do not hesitate to contact us.

Yours sincerely

DAVID SIMMONDS
McCarey Simmonds Limited
e-mail: david@mccareysimmonds.co.uk



1 - View of the front Chaucer Court 1-6



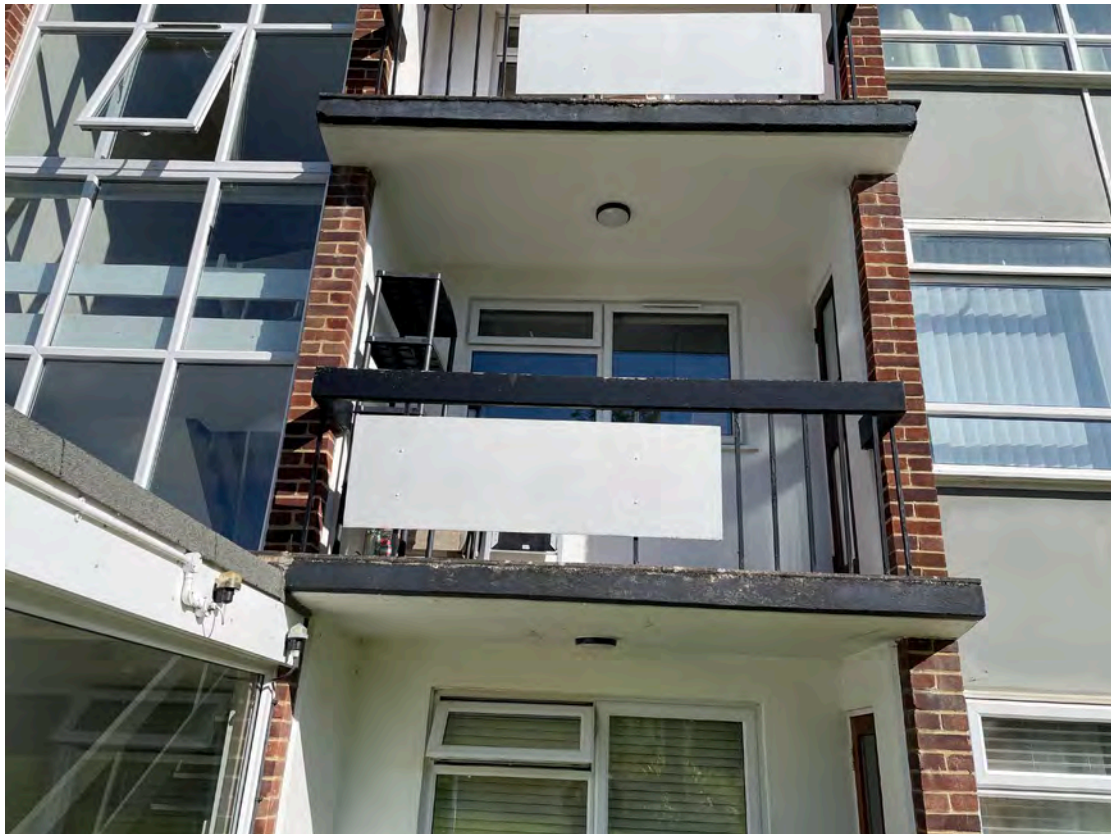
2 - View of the front Chaucer Court 7-12



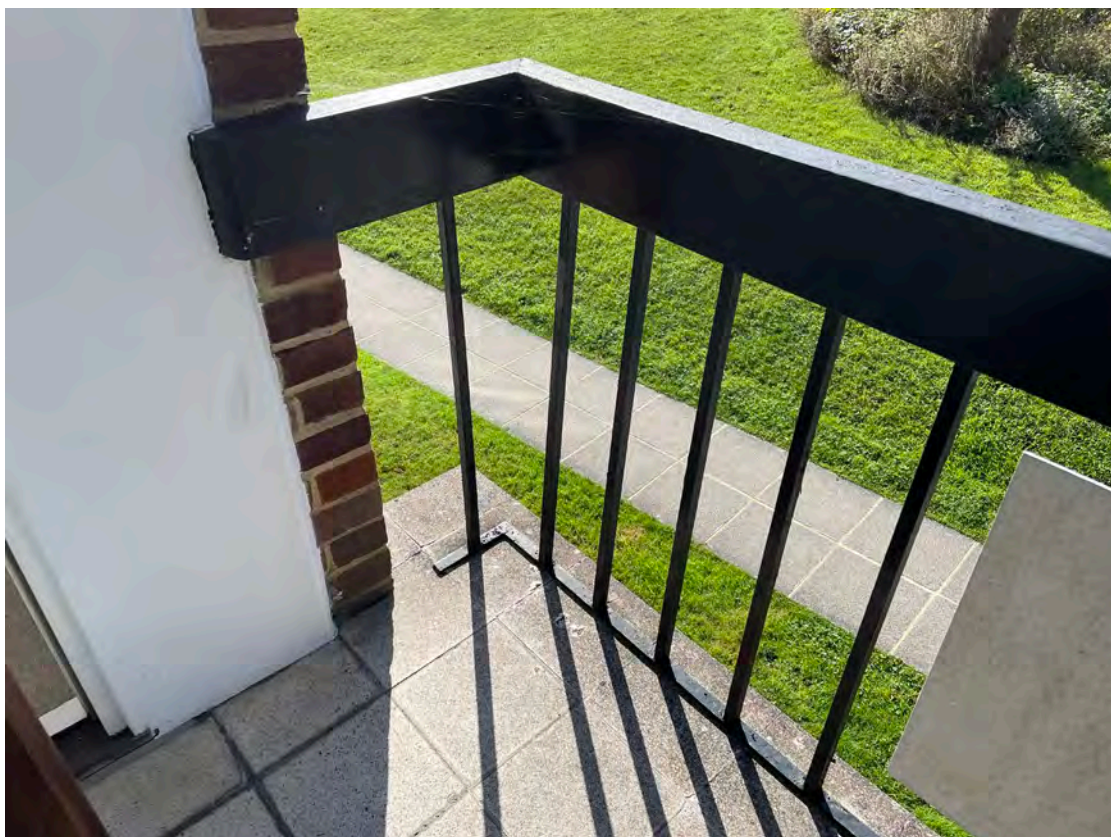
3 - View of the front Byron Court 1-6



4 - View of the front Byron Court 7-12



5 – Closer view of No.4 Chaucer Court Balcony



6 – No. 4 Chaucer Court Balcony east side



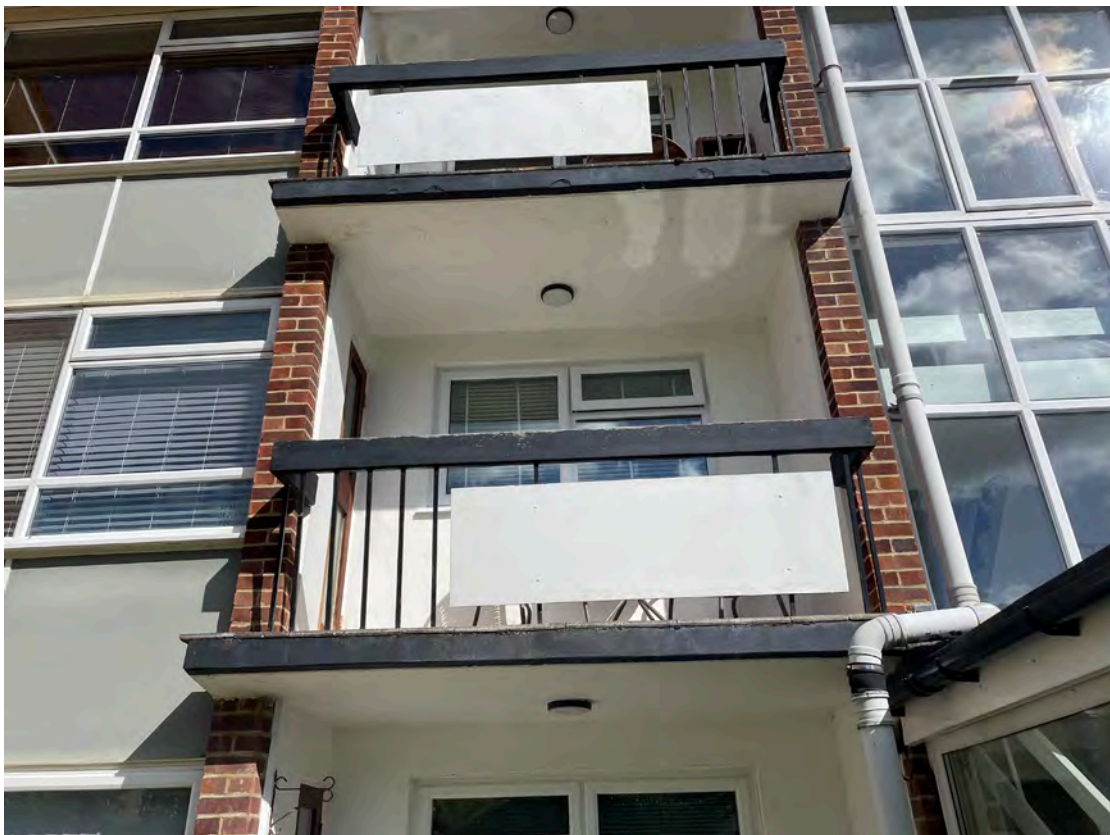
7 - No. 4 Chaucer Court Balcony front section with infill panel



8 - No. 4 Chaucer Court Balcony west side



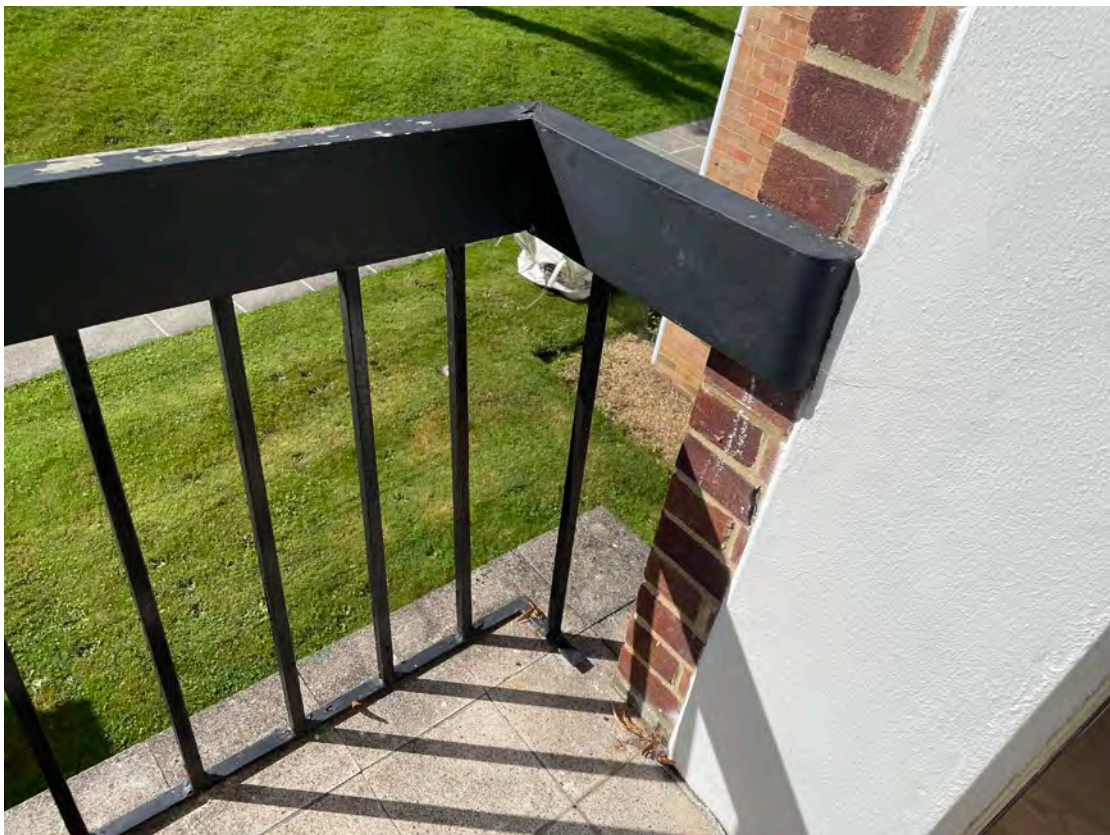
9 - No. 4 Chaucer Court Balcony west side return



10 - Closer view of No.9 Chaucer Court Balcony



11 - No. 9 Chaucer Court Balcony east side with extra post to the front corner



12 - No. 9 Chaucer Court Balcony west side



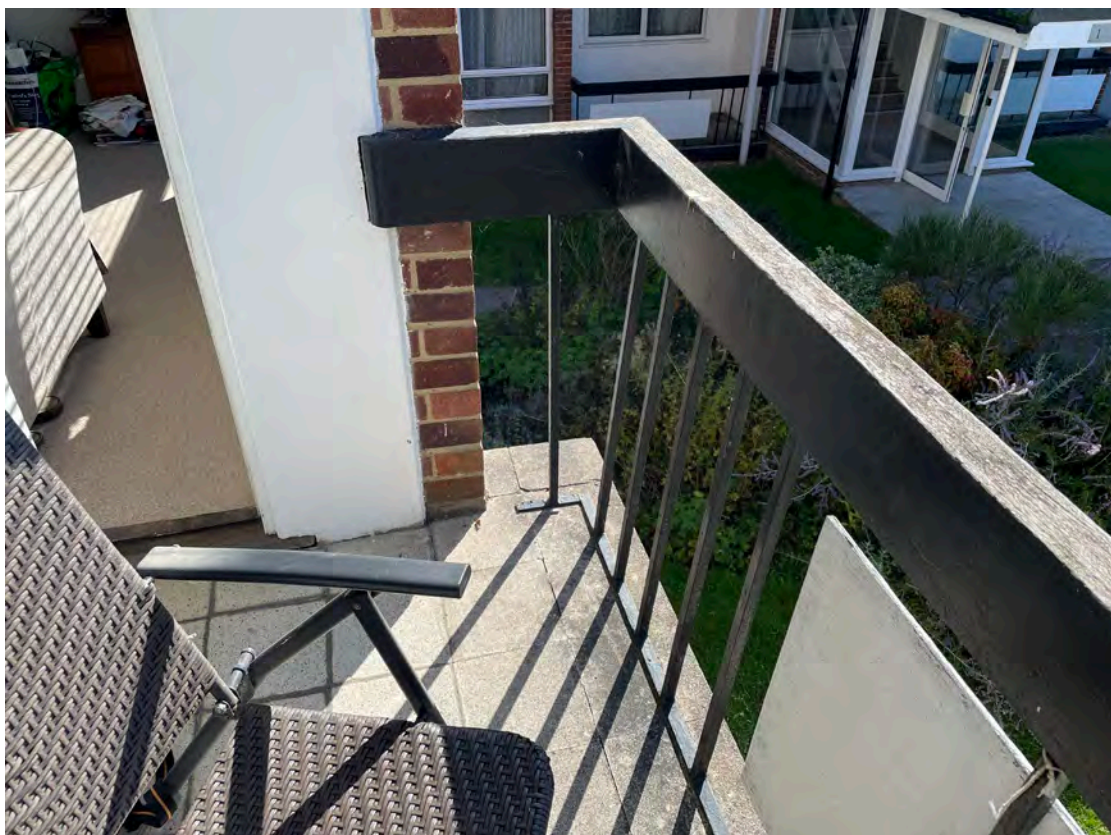
13 - No. 9 Chaucer Court Balcony east side corner handrail bracket



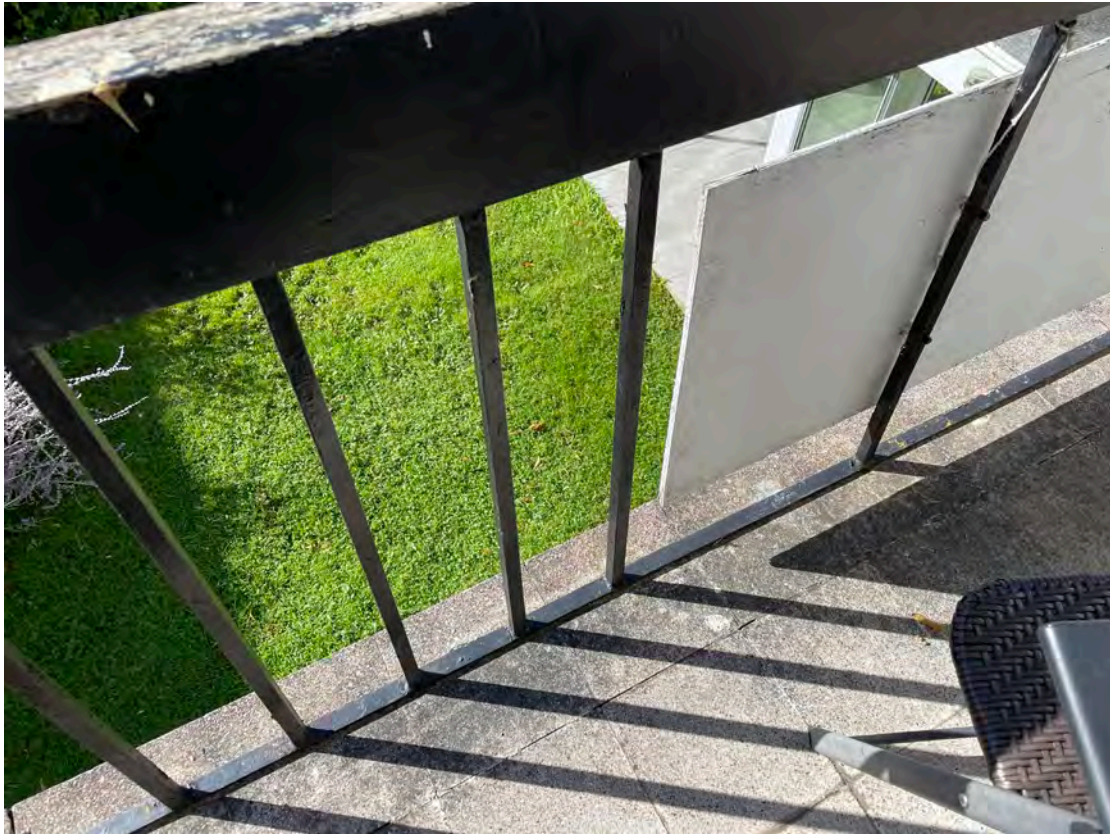
14 - No. 9 Chaucer Court Balcony east side extra post top welded connection



15 - Closer view of No.10 Chaucer Court Balcony



16 - No. 10 Chaucer Court Balcony east side



17 – No. 10 Chaucer Court Balcony front section with plyboard infill panel



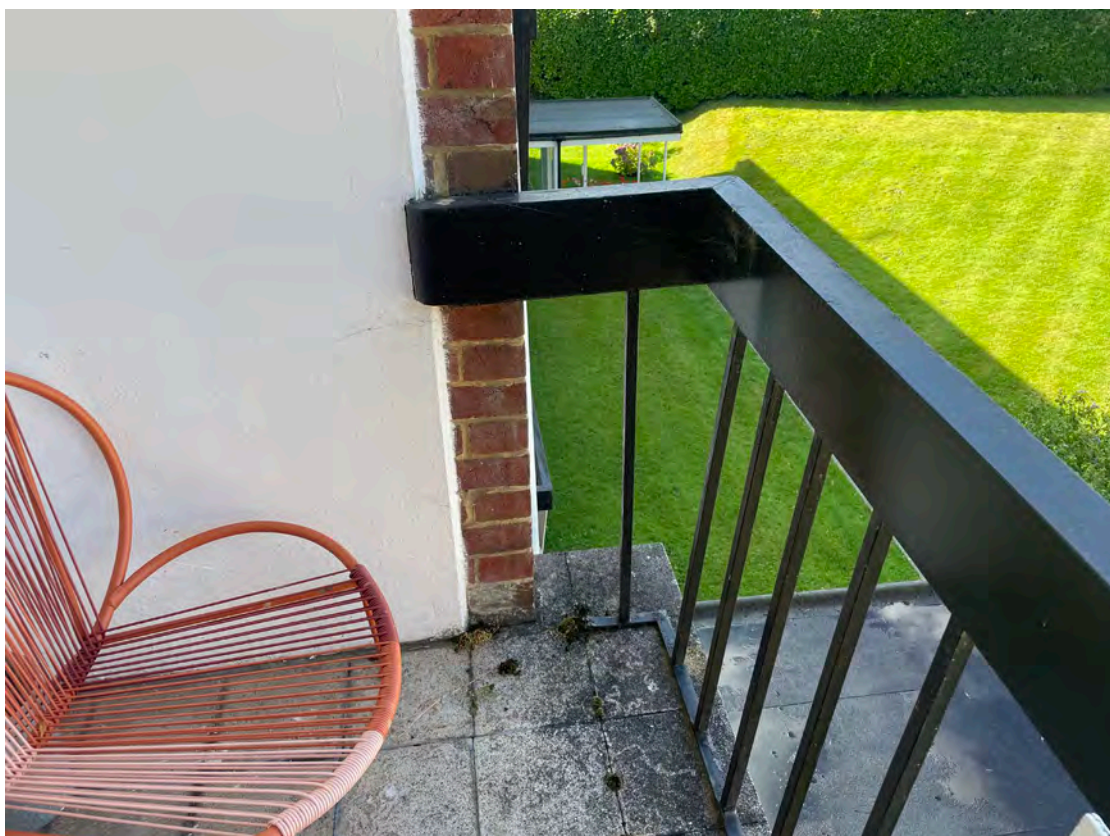
18 – No. 10 Chaucer Court Balcony west side



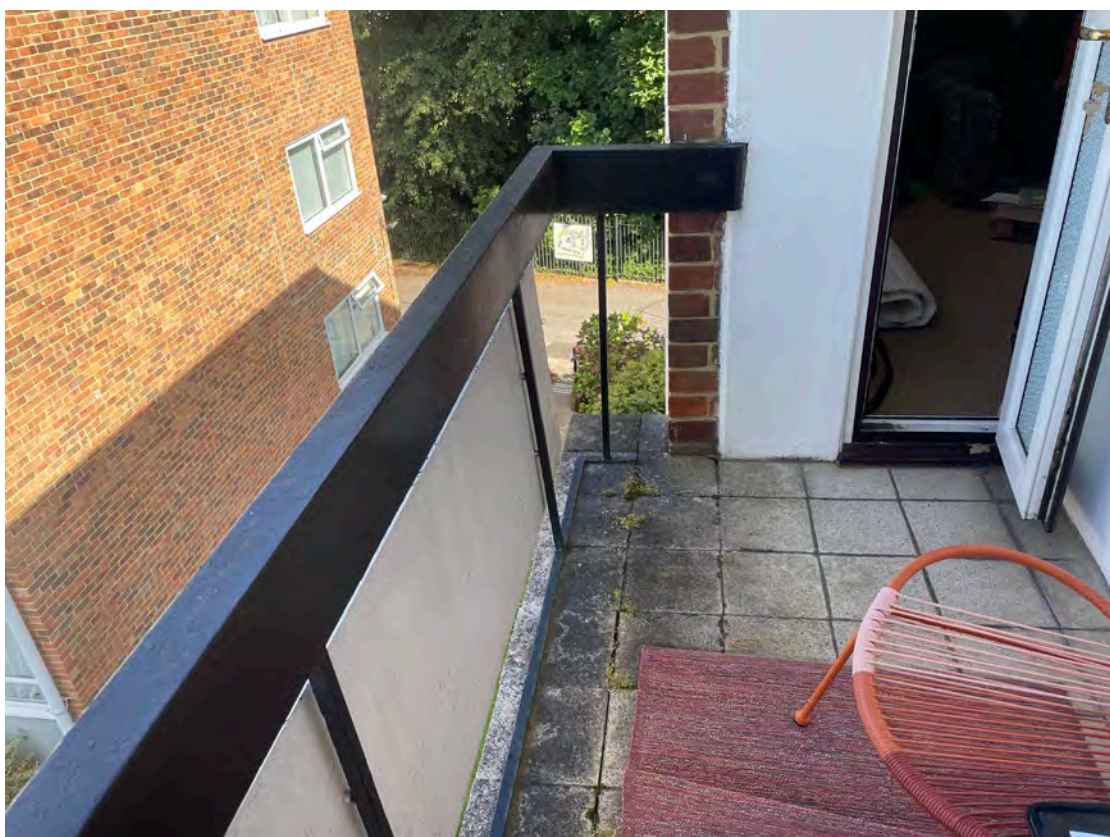
19 - No. 10 Chaucer Court Balcony delamination of infill plyboard panel



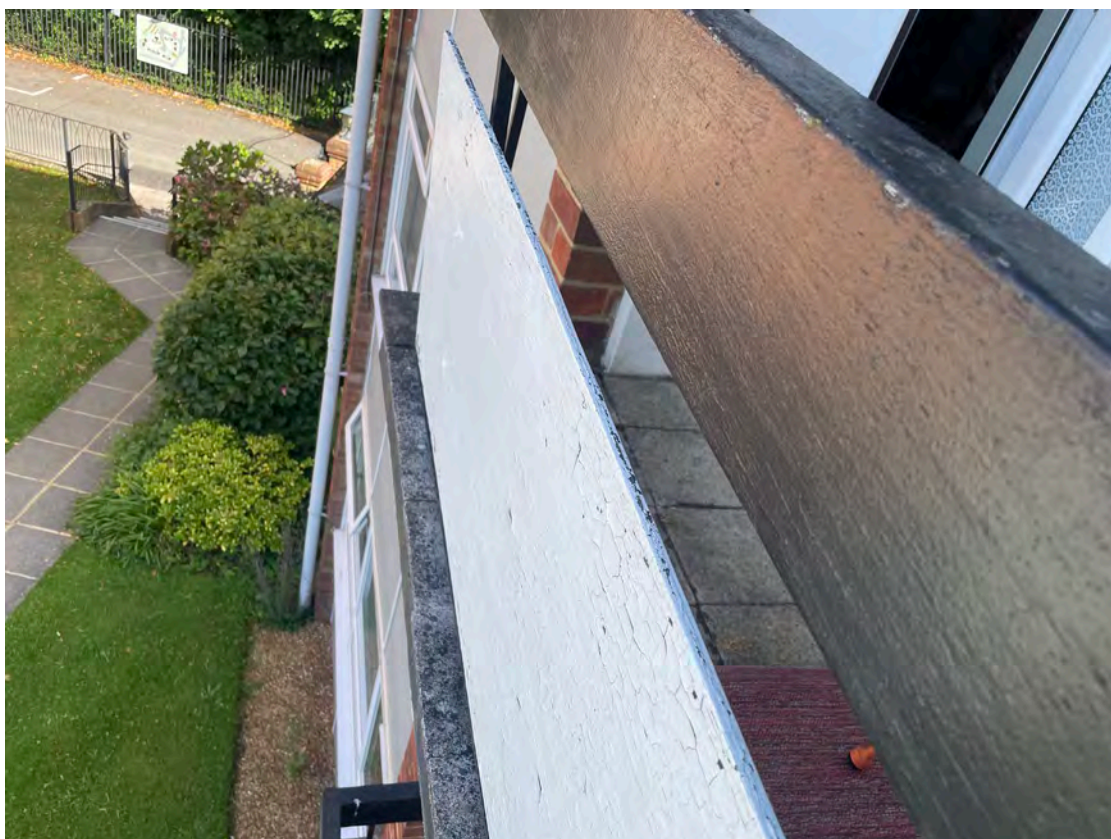
20 - Closer view of No.5 Byron Court Balcony (top floor)



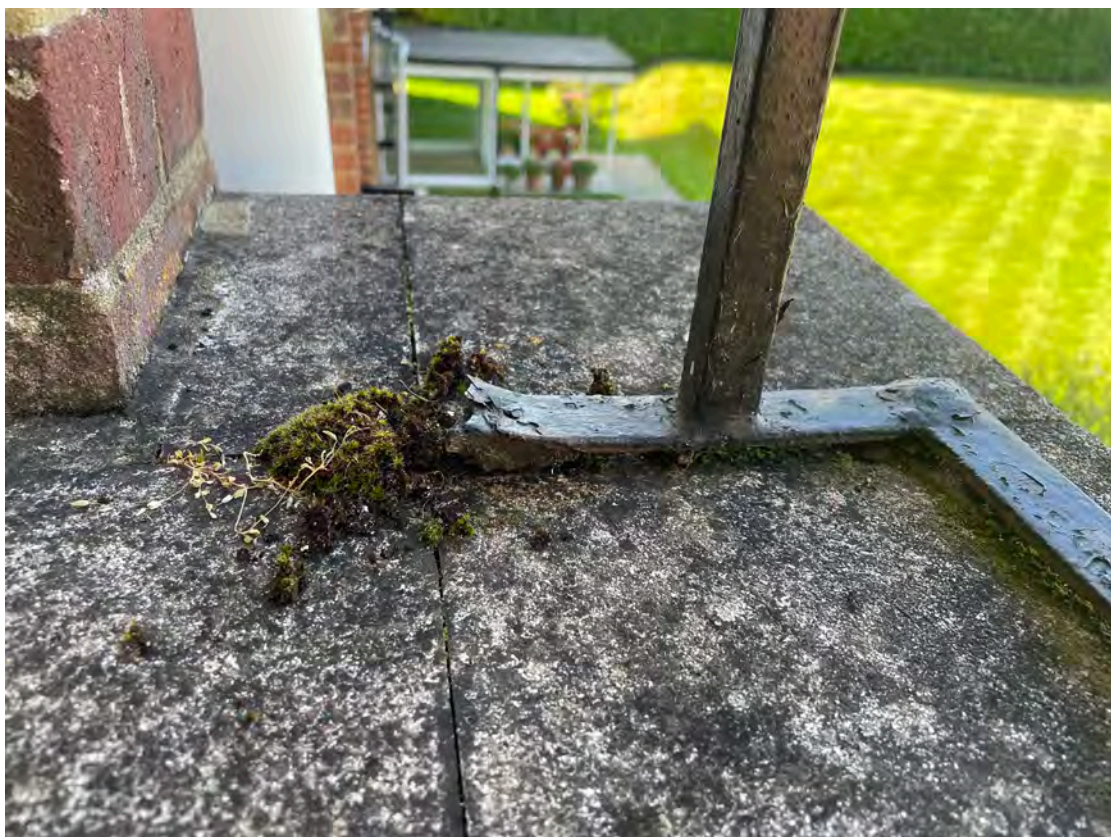
21 - No. 5 Byron Court Balcony south side



22 - No. 5 Byron Court Balcony north side



23 - No. 5 Byron Court Balcony plywood infill panel with flaking paintwork



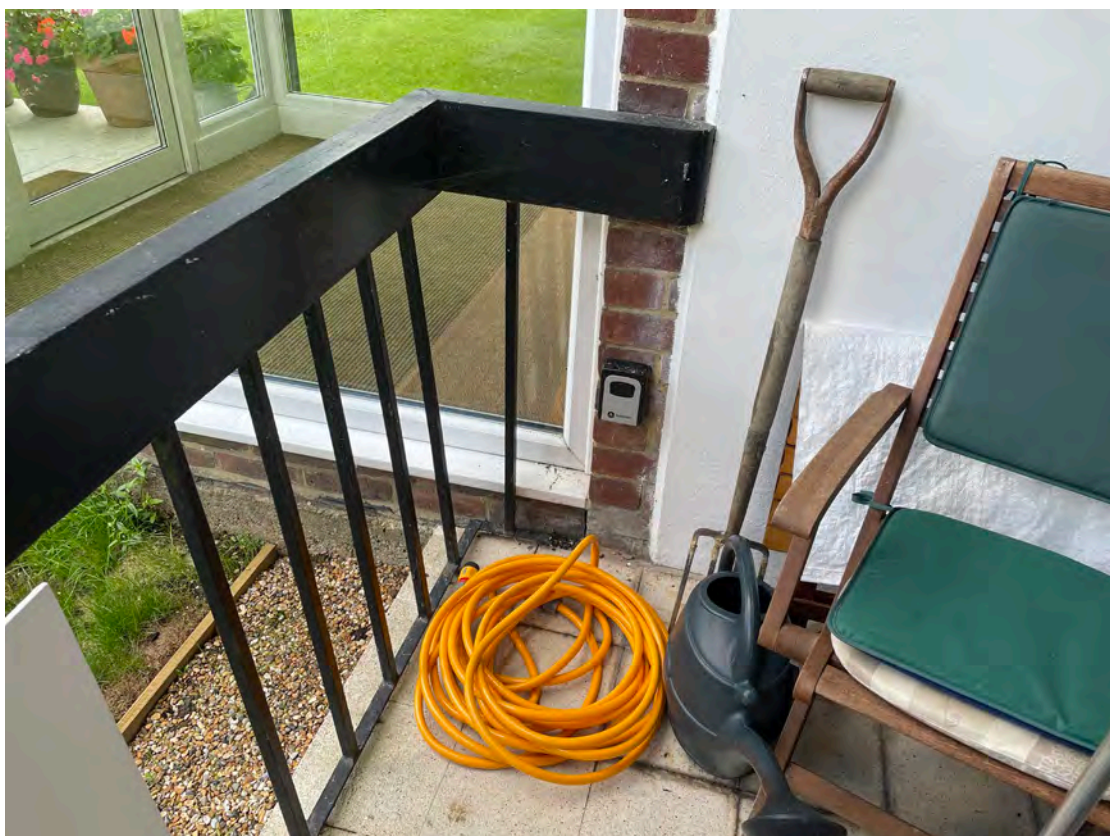
24 - No. 5 Byron Court Balcony Corrosion & delamination of bottom rail



25 – No. 8 Byron Court Balcony south end



26 – No. 8 Byron Court Balcony front infill panel



27 - No. 8 Byron Court Balcony north end



28 - No. 8 Byron Court Balcony gap and screw fixing at base of handrail



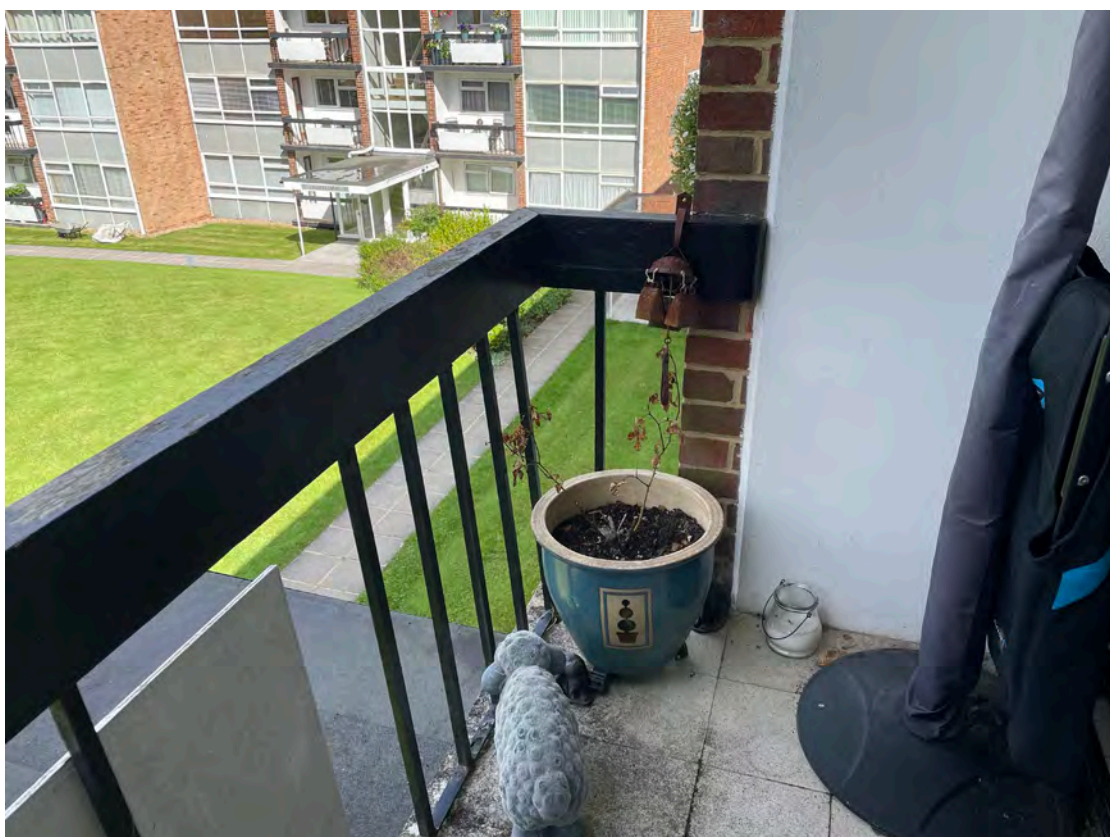
29 - No. 8 Byron Court Balcony gap and screw fixing at base of handrail



30 - Closer view of No.12 Byron Court Balcony (top floor)



31 - No. 12 Byron Court Balcony south end



32 – No. 12 Byron Court Balcony north end



33 – No. 12 Byron Court Balcony front bottom rail corrosion and cracked paving slab



34 – No. 12 Byron Court Balcony front infill plywood panel fixing

STRUCTURAL ENGINEER'S INSPECTION – CONDITIONS & LIMITATIONS

1. The report is a record of a visual inspection carried out by, or under the direction of a Chartered Civil or Structural Engineer and must not be misinterpreted as a Structural Survey, such as would be carried out by a Chartered Surveyor. The report is not a Valuation Report.
2. The inspection is strictly limited to the items requested and these will be detailed in Clause 1 of the report. No consideration will be given to any other aspect or parts of the building.
3. The report is confidential to the Client(s) stated in Clause 1 and has been prepared to their instructions for their own purposes only and it is not permitted to disclose this report to any other parties (except the Client's own Solicitors, Surveyors, Building Societies/Lender or Estate Agents) without the prior consent of McCarey Simmonds Limited.
4. The copyright of this report remains the property of McCarey Simmonds Limited.
5. No liability for the contents of this report is accepted to any parties other than the Client(s) stated in Clause 1. No parties other than the Client(s) stated in Clause 1 should rely upon this report.
6. Unless specifically stated otherwise:
 - 6.1 Trial holes were excavated prior to the site visit and preparation of the report.
 - 6.2 All external observations will be carried out by eye from the ground level only. Internal inspection is made within the limits of ready accessibility and it is not normal practice to lift floor coverings or floorboards, remove fixtures, panels or plaster or move heavy items of furniture or bulky goods or materials.
 - 6.3 No inspection will be made of any roof voids, floor joists, wall cavities, drainage pipe work or any other hidden or inaccessible parts.
 - 6.4 No timbers will be checked for damp, rot, infestation by wood-boring insects or other defects.
 - 6.5 It should not be construed that any parts of the construction comply with the requirements of the Building Regulations Act or standard practice either current or as current at the time of the original construction. No enquiries to any Authorities will be made.
 - 6.6 No testing or enquiries into the presence of or susceptibility to pollution, contamination, radiation, methane, radon or other gases or hazardous substances has been carried out.
7. Unless specifically stated otherwise in the report, any recommendations for works given in the report are outline only and are to be confirmed or modified as appropriate as detailed design stage.
8. Where trial holes are specifically included in our instructions the condition of the footing and the founding soil relates only to the point of excavation and does not necessarily confirm a continuation of the same conditions throughout the non-inspected areas of the structure. Whilst such trial pits will usually provide a reasonable indication as to the general state of the foundations and ground conditions, these cannot be determined with complete certainty.
9. Under the Construction (Design & Management) Regulations 1994, the Client has obligations for ensuring Health and Safety arising from any construction work. If it is proposed to proceed with construction work based upon information or recommendations contained in this report, these regulations probably apply. Further details of any issues arising from our report or the Client's obligations generally are available on request.
10. Unless dealt with more specifically above, the Association of Consulting Engineers Conditions of Engagement 1995, Agreement D applies, including optional clauses 2.11, 3.7, 8.1A, 8.1B and 8.1C. Optional clauses 8.2A, 8.2B and 8.2C do not apply.