

## **383, 385 + 387 Northumberland Avenue Reading RG2 8DG**

### **Window + balcony door renewals**

**Design + Access Statement | 25 September 2022**

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#### **INTRODUCTION**

383, 385 and 387 Northumberland Avenue are three virtually identical five-storey residential blocks on the east side of Northumberland Avenue, close to its junction with Hartland Road. The location is well to the south of the centre of Reading, being just over a mile north of the M4. To the rear of the three blocks is the John Rabson Recreation Ground, behind which is rising ground and this give the impression that the blocks sit in front of open countryside.

In form the blocks are unequal pinwheels, with simple projecting concrete balconies at first and third floors.

The blocks appear to have been originally constructed in the 1960s, probably of uninsulated brick cavity construction. In the 1990s the blocks were overclad, to improve their very poor thermal performance and probably aimed at resolving cold bridge issues relating to their concrete structure.

The overcladding is generally finished with stone-dashed render, dark grey to the ground floor and lighter grey above. The darker dash is comprised of stone chips which are very similar to flint both in colour and texture. However the external corners of each block – given the pinwheel plan, there are eight of these on each block – are finished with a sub-post-Modern quoin detail, with some quoins almost a metre wide, made of rendered polystyrene. Some windows have a smooth rendered surround in a contrasting shade of grey to their background: at ground floor an extravagant version of the quoin detail becomes giant voussoirs. Ground floor quoins are finished in light grey; all other quoins and all voussoirs are a rather grimy custard colour.

All original roofs were presumably flat. These have been reroofing with a shallow hipped pitched roof with wide overhanging eaves. A smooth render band runs round each block beneath this level.

The original windows were in all likelihood single-glazed EJMA-type painted timber casements, probably replaced at the time the overcladding works were carried out. Their replacements, the existing white uPVC-framed windows are double-glazed, but it is probable that the glazing units do not exceed the standards applying at the time of their installation, so they are likely to achieve a U-value of of around 2.6-3.0 W/m<sup>2</sup>K [current maximum permitted is 1.4W/m<sup>2</sup>K] . All opening lights are top- or side-hung casements, some combined with fixed lights.

Their design does not permit safe, or in some instances any, cleaning from inside the dwellings, and there is no evidence of security glazing to ground floor windows.

The front entrance door and screen is of painted timber; this is to be retained.

#### **DESIGN**

The scope of this application is the replacement of the existing white uPVC-framed standard double-glazed windows and balcony doors with white uPVC-framed high-performance double-glazed windows and balcony doors.

The proposed window and balcony door replacements are configured to achieve compliance with the relevant current Building Regulations in terms of Means of Escape and safe cleaning, and will also comply with current standards for thermal performance, background ventilation, and safe/secure glazing. Thermal performance required by Part L of the Building Regulations is now 1.4 W/m<sup>2</sup>K so the new windows will cut window heat losses by at least half. Combined with reduced ventilation losses resulting from superior draught stripping compared to the existing, window and door losses could be reduced by more than two-thirds.

The proposed windows and doors will protect the visual appearance of the property, reflecting the current configuration. The new windows will offer significant benefits compared to the existing, in terms of thermal comfort, reduced emissions, ease of use, health and safety and reduced maintenance costs, with guarantees provided against defects. Crucially, the work will significantly reduce heating energy requirements at a time of sharply rising energy costs to hard-pressed social housing residents and an urgent need to reduce carbon emissions.

## **ACCESS**

The proposed windows can be safely cleaned from inside the properties – all outward opening casement windows will be fitted with friction stay hinges to enable easy cleaning of external glass faces.