

Design and Access Statement

Beetham Tower,
301 Deansgate,
Manchester,
M3 4LQ

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MHBC Cumming are instructed by North West Ground Rents Ltd (NWGR) to make a planning application in connection undertaking repairs to the external elevation of the Building known as Beetham Tower.

Introduction/background

The building constructed in 2006 is clad in stick form aluminium curtain walling. The glass to the lower 22 floors is supported off the structural aluminium frame with aluminium carriers to which the glass is adhered using a structural silicon bond. There are two types of glass to the lower 22 floors adhered with structural silicon, Vision Units (VUs) and Shadow Box Units (SBUs). The upper floors, 23-47, also feature Vision Units and Shadow Box Units, the design of the latter being different to the SBUs on the hotel.

Vision Units are formed of sealed double-glazed units, in plain, fritted and part fritted glass. Shadow Box units are formed of a single pane of toughened glass, again in plain, fritted or part fritted glass.

In 2014, during a routine inspection, several the SBUs were found to be loose. The assessment at that time was that there was a risk of glass falling from the building. The original design and build contractors, Carillion attended the property and secured all SBUs with temporary stitch plates comprising short sections of aluminium (150mm long) screed into the underlying aluminium framework through joints between the SBUs (or adjoining VUs) using stainless steel screws. These temporary stitch plates were reported as being suitable for no more than 3 years.

Carillion proceeded to assess the defect and started discussions with their supply chain (albeit slowly) as to how the building could be repaired. Carillion fell into administration prior to the conclusion as to the most appropriate method of repair and before any permanent repair works had progressed.

Repair options

There are two options for repair.

1. To remove the SBUs and their carrier frames from the building to allow the failing bond material to be replace. New carrier frames would need to be fitted.

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2. To leave the SBU's on the building and provide surface mounted pressure plates to all vertical joints between SBUs and VUs. The pressure plates would remove any dependency on the failing bond material.

Planning consent would not be required for the first repair option as the building would remain visually the same as originally constructed. The repair option is however not viable (the Landlord is unable to fund the cost). The second option would visually change the building and although the change is considered minimal the advice is that planning consent is required. There are 1440 SBUs on the building which require repair, as noted above all are on the lower 22 (hotel) floors.

Plans and Drawings

To accompany this Design and Access Statement the following drawings have been prepared and form part of the application,

1193- 400 – Site Plan.

1193- 600 – Existing North and East Elevations.

1193- 601 – Existing South and West Elevations.

1193- 602 – Proposed North and East Elevations.

1193 -603 – Proposed South and west elevations.

The proposed drawings show all locations where pressure plates are required.

CGIs

To illustrate the minimal impact of pressure plates 3 CGIs have been prepared and form part of the application. The first CGI (reference V1) shows the building as existing. The second and third (reference V2 and V3) provide views of the building with the pressure plates provided where required.

The original design of the cladding, incorporating a variety of glass types with various patterns of fritting makes the for a visually very asymmetrical building. This asymmetry will greatly help to soften the visual impact of the pressure plates.

Methodology / Working Hours

In order to respect the quiet enjoyment of the residential tenants, working hours will be restricted to 8am-5pm weekdays with no work carried out on Saturdays, Sundays or Bank Holidays.

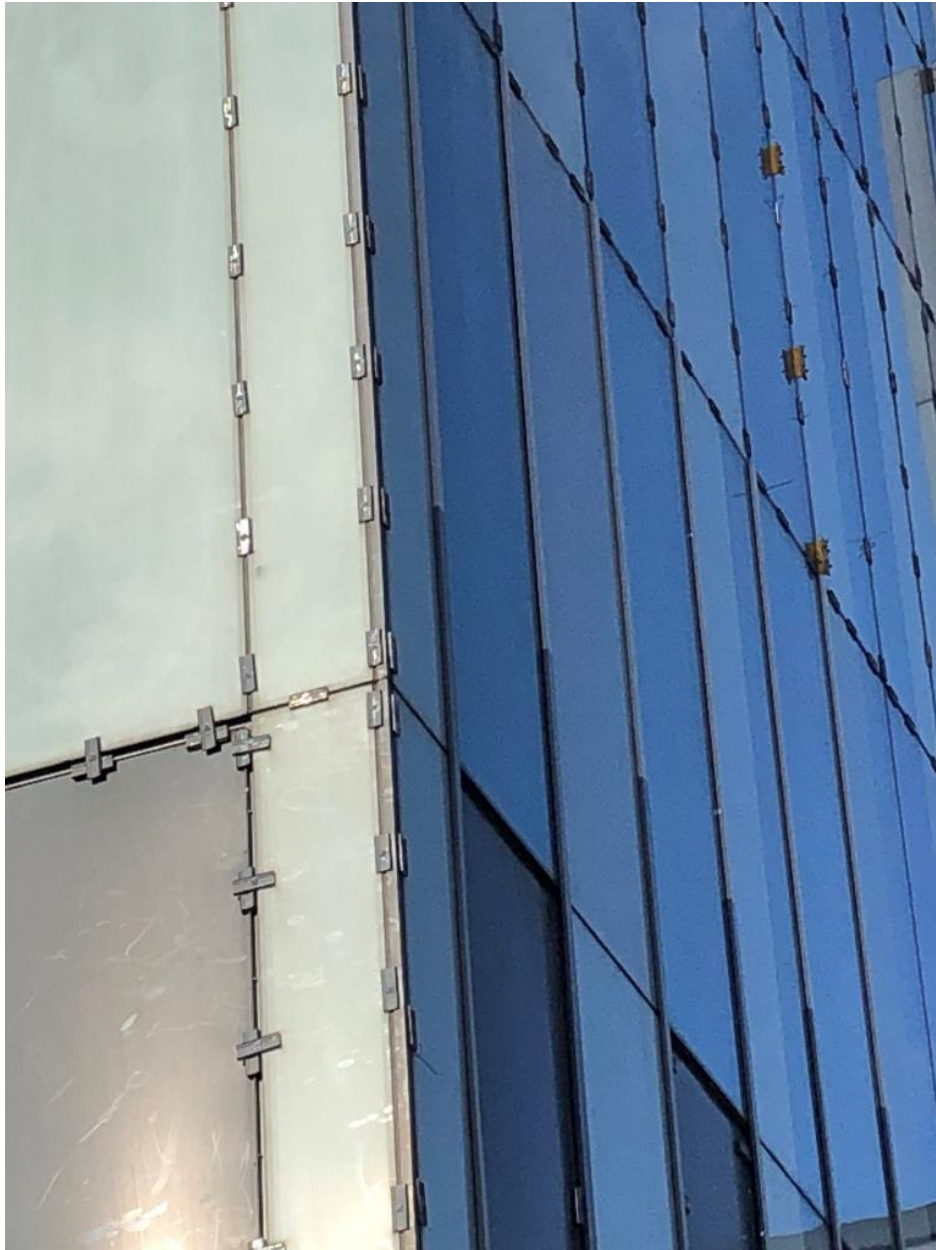
The working day will not involve any drilling until after 9:30am as the contractors will require 1 and a half hours at the start of each working day to rig up the necessary access equipment. At the end of each working day the contractors will cease work activities at 3:30pm to derig the access equipment.

Photographs

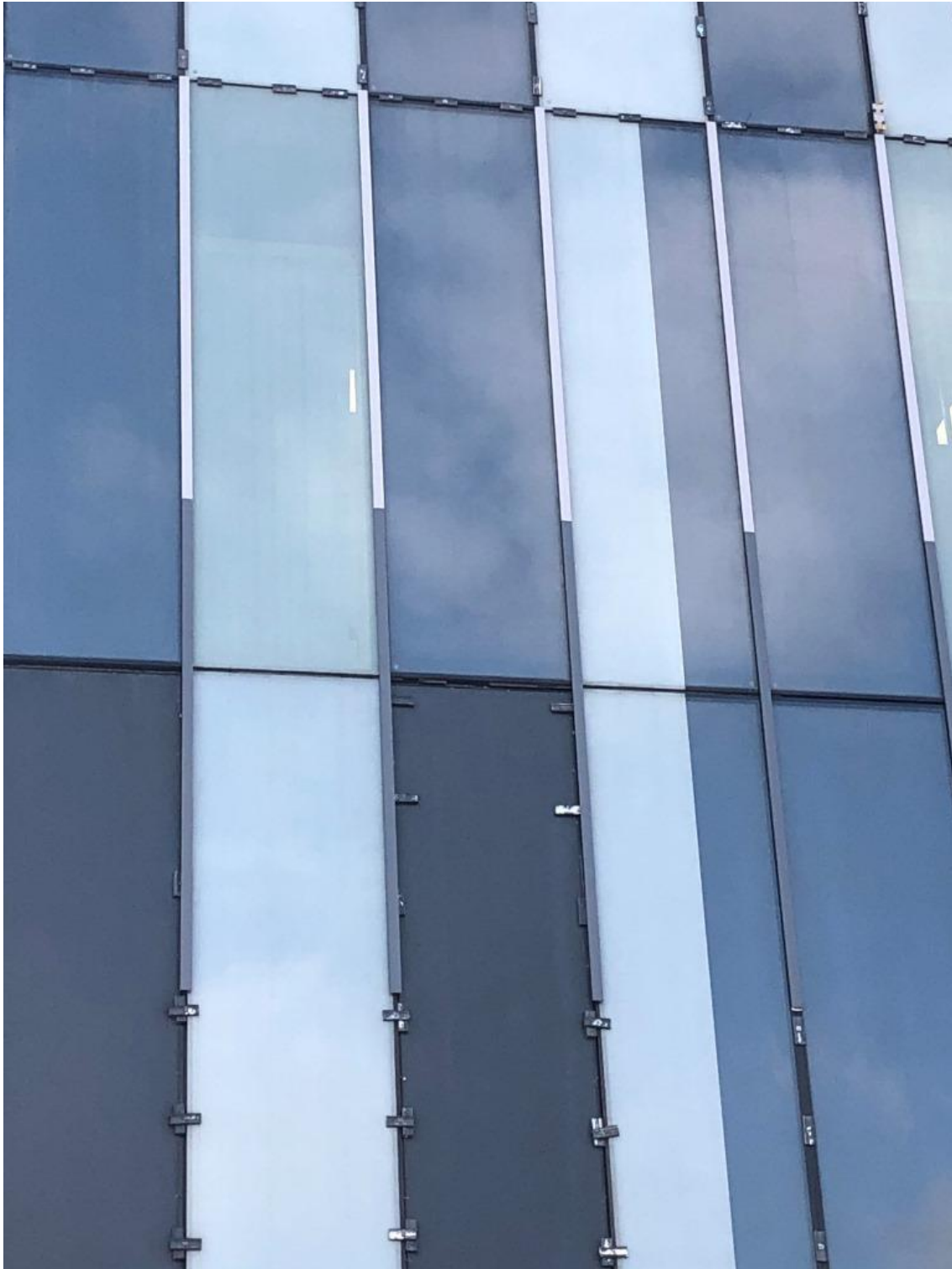
To assist with the visualisation of the pressure plates mock-ups have been provided on site. These are available for inspection. Photographs of the mock-ups are replicated below.



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Note- the small plates that can be seen on some of the vertical and horizontal lines are the temporary stitch plates fitted by Carillion in 2014/15. The pressure plates are the grey strips. They are in two colours- THIS APPLICATION is for the dark version (lower).



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Technical details

The methodology for fixing the pressure plates is not being provided as part of the application as all fixings associated with the installation of the plates will be concealed by the plates and accordingly have no bearing on the physical appearance of the building. Technical details are available if required.