



70

GREAT BRIDGEWATER STREET

Visual Mock-Up (VMU) - Report (preliminary)

ISSUE DATE

Rev. - - 21.12.22

INTRODUCTION

This preliminary report and relates to initial response to discussions had on site regarding the Visual Mock-Up (VMU) of the facade as viewed on 19.12.22 by Dave Roscoe, Paul Mason and Emily Booth from Manchester City Council.

The report outlines the design teams initial response to the discussions and outlines the plan of action as regards addressing design and quality issues and further clarifications. These will then form part of a 'final' document recording comments and response to the VMU.



REF - 70 GBS-VMU-ZZ1
IMAGE
Photograph view of VMU

NOTE - The VMU was designed to include as many junctions as practicable and therefore the quantity of joints is therefore greater across a relatively small area than would appear on the installed facade.



REF - 70 GBS-VMU-ZZ2

IMAGE

Photograph view of VMU

MATERIALS

NOTE - The VMU was designed to include as many junctions as practicable and therefore the quantity of joints is therefore greater across a relatively small area than would appear on the installed facade.

PRELIMINARY RESPONSE

The following pages include photographs of the VMU as viewed 19.12.22 and is supported by the following initial design team response:-

We intend to address the elements on the Visual Mock-Up (VMU) discussed on site as follows:-

1. **Junction of unitised to precast concrete** - we would agree that the detail as installed is not correct and, on review of the facade details it is not representative of the proposed detail. We will provide a detail drawing showing the proposed arrangements and have the VMU updated accordingly for review in due course.
2. **Rotated fin fixings** - we will explore the potential to omit visible fixings to these elements but will also provide sectional diagrams showing the visibility of these fixings when positioned in the correct vertical position on the facade.
3. **Stack-joint gasket** - as noted the gasket at 'floor' level on the VMU (left hand panels) is poorly installed and will rectify this on the VMU as well as highlighting this as an installation quality assurance matter for the unitised facade installer to monitor and control.
4. **Fin Joint size (15mm)** - we have requested further information from the unitised facade installer and the facade engineer (Ramboll) regarding the technical requirements for the joint size and whether this can be reduced. We would wish to add would add that the VMU was designed to include as many junctions as practicable and therefore the quantity of joints is therefore greater across a relatively small area than would appear on the installed facade. See attached image of the Performance Mock-Up (PMU) which shows a double height arrangement that is more representative of the number of joints on a typical section of facade and we will provide additional PMU images as part of our full response.

We believe, the above points notwithstanding, that the VMU represents a high quality facade arrangement with the degrees of complexity and clarity of design that reflect the original design concepts. The facade will provide a dramatic change to the area providing an apparently new building whilst at the same time as achieving significant embodied carbon benefits through the retention of the existing structural frame and, as a result, delivering a BREEAM Outstanding retro-fit

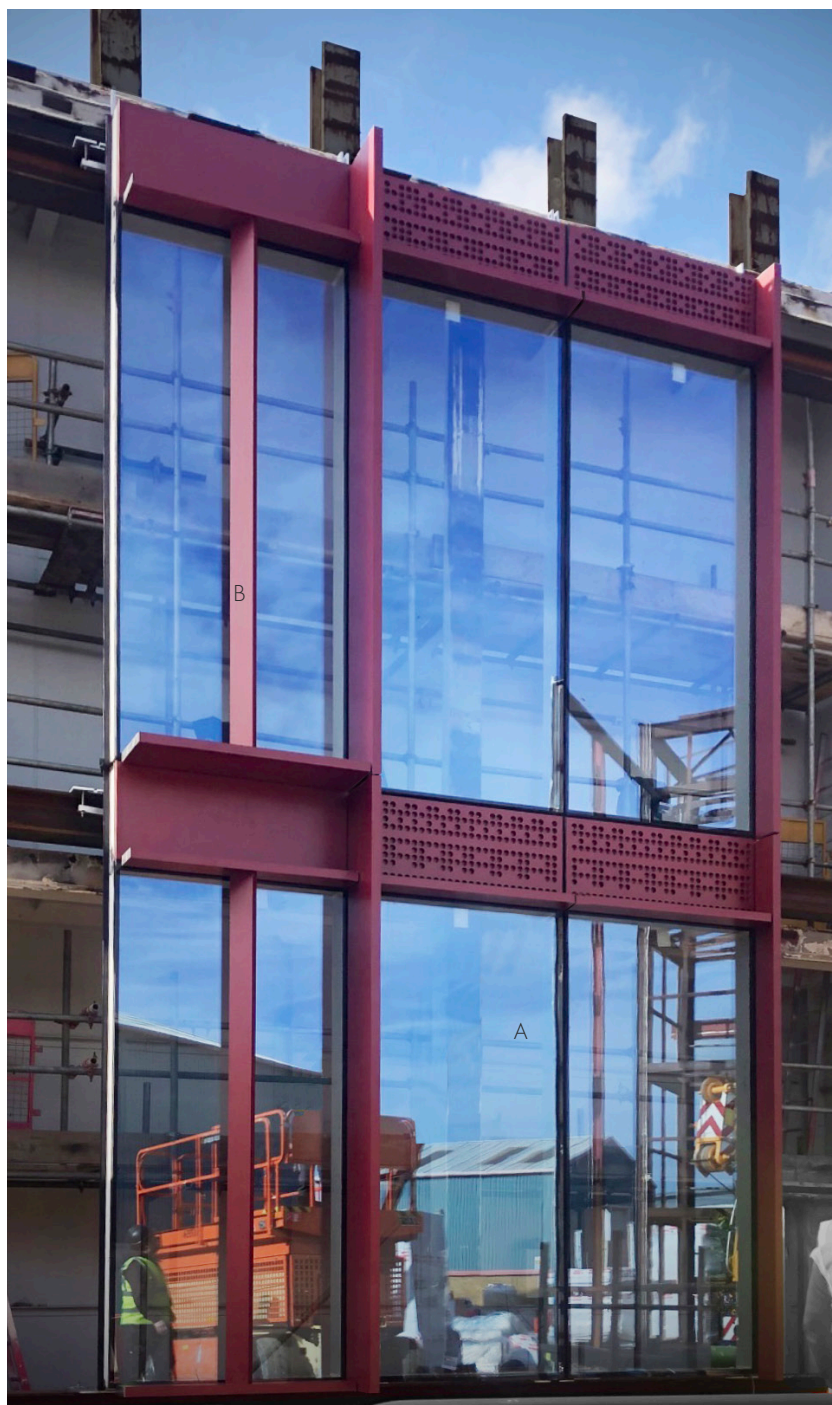
**REF - 70 GBS-VMU-ZZ3****IMAGE**

CGI view of VMU

MATERIALS

- 1 - Junction of unitised to precast concrete
Review and amend detail
- 2 - Rotated fin fixings
Clarify requirement and sight lines
- 3 - Stack-joint gasket
Quality assurance issue - notify contractor and correct
- 4 - Fin joints
Provide clarification on requirement from installer

NOTE - The VMU was designed to include as many junctions as practicable and therefore the quantity of joints is therefore greater across a relatively small area than would appear on the installed facade.



REF - 70 GBS-VMU-ZZ6

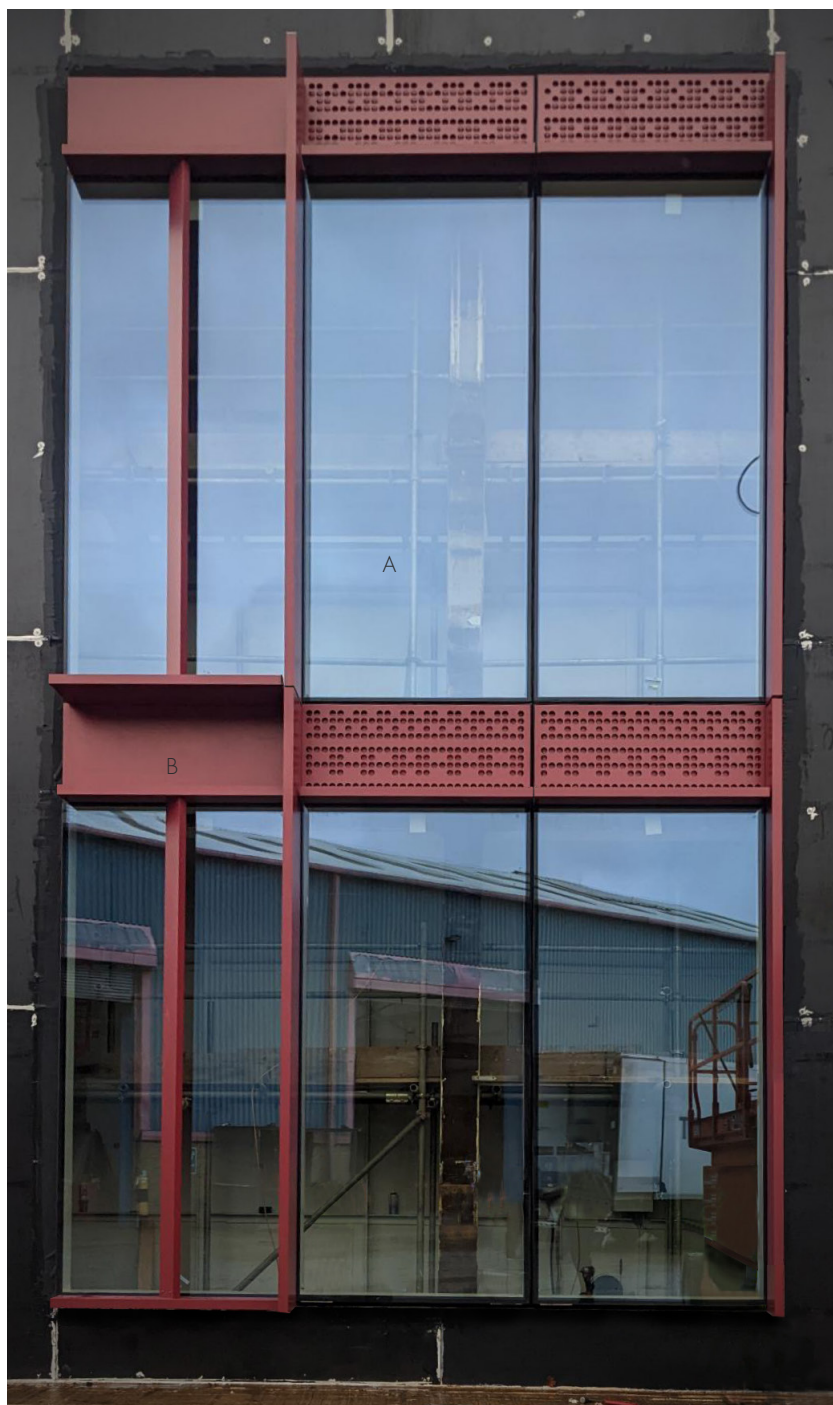
IMAGE

Photograph view of PMU

MATERIALS

A - Clear glass
B - PPC aluminium
PPC D2525 -YW2851 -RAL 3032 (30% matt)

NOTE - PMU (Performance Mock-Up) represents a typical bay and a half of the facade over two stories; all joints and fin sizes are in line with VMU.

**REF - 70 GBS-VMU-ZZ6****IMAGE**

Photograph view of PMU

MATERIALS

A - Clear glass
 B - PPC aluminium
 PPC D2525 -YW2851 -RAL 3032 (30% matt)

NOTE - PMU (Performance Mock-Up) represents a typical bay and a half of the facade over two stories; all joints and fin sizes are in line with VMU.

