

Formation Design and Build

To: Daniel Boama
From: Matthew Ashley
Date: 25/05/2024
Re: Response to Overheating Compliance and Removal of Brise Soleil

Dear Daniel,

Thank you for the attached detailed review and subsequent feedback on our recent submissions concerning the overheating condition. We appreciate the thorough evaluation and would like to address the comments to ensure clarity and alignment with the planning condition.

Compliance with Overheating Measures

Following the submission of our full overheating report, it is confirmed that the revised design, which excludes the Brise Soleil, still complies with the required measures as stipulated in Condition 5 of the original planning permission.

Key Points from the Overheating Report:

Natural Ventilation: Our design maintains effective natural ventilation with openable areas of 100% and an opening angle of 15° (with Secure by Design measures for ground floor windows). This ensures adequate airflow for Overheating, even without the Brise Soleil.

Glazing Specifications: We have improved upon the maximum required glazing g-value of 0.58 to control solar gains, as specified in Condition 5. This specification is critical in maintaining internal temperatures within acceptable limits.

Internal Blinds: Internal metal venetian blinds with a solar transmittance of less than 11% and an effective overall g-value of 0.36 (including glazing) have been incorporated into the design. These blinds provide improved shading to mitigate overheating effectively. The blinds are fixed to not impede the opening of the windows.

Mechanical Ventilation with Heat Recovery (MVHR): The MVHR system includes a summer bypass feature, ensuring 1.5 air changes per hour (ach). This system is essential in maintaining ventilation and cooling without relying on active cooling systems.

The decision to remove the Brise Soleil was made after a thorough analysis of design and construction, confirming that the revised design would not compromise the building's thermal performance. As per Section 96A of the Town and Country Planning Act, a non-material amendment was submitted with changes to Sattish Jassal Architects planning permission. **This amendment was approved.**

Our amendment was carefully considered to ensure it remains non-material, thus not significantly altering the compliance with the original planning conditions.

Approved NMA – 16/11/2023

Within the approved NMA from November 2023, the removal of Brise Soleil from the original scheme was minimal and aligns with the goal of optimising the building's design while ensuring compliance. Our comprehensive overheating assessment demonstrates that the revised design, which excludes the Brise Soleil, still meets all necessary mitigation measures.

Please find an abridged table below outlining the main Nonmaterial amendments of the scheme.

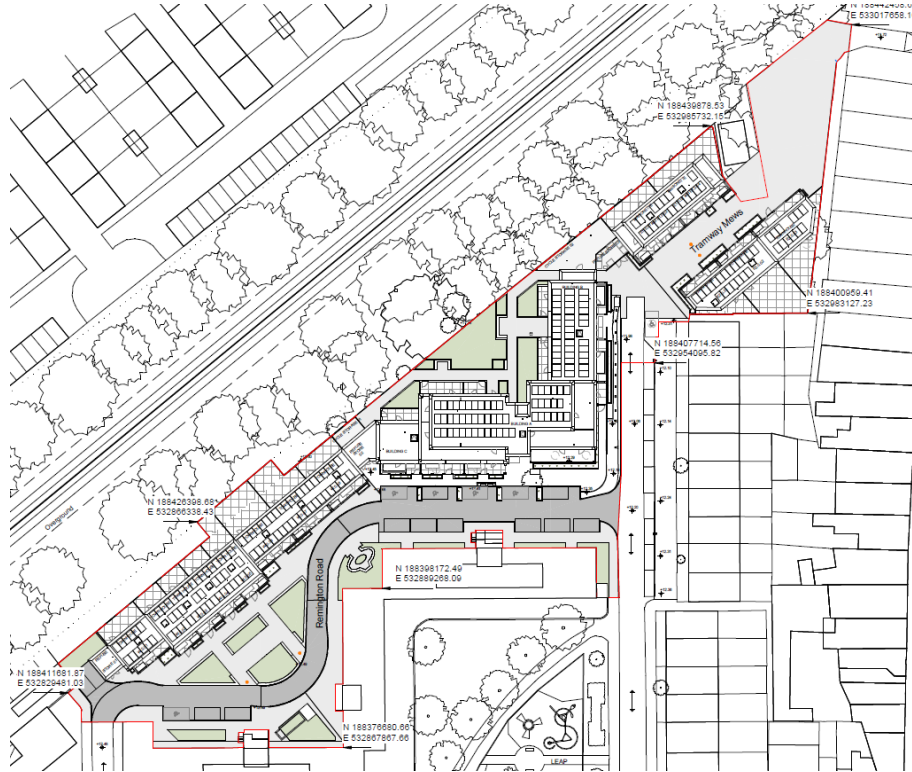
Original Planning application		Planning Superseded Approved NMA	
CGI – View from Pulford Road			
			
CGI – View from East Townhouses			
			
CGI – Seven Sisters Sq			
			
South Elevation of block ABC (Brise Soleil originally not shown)			
			
South Elevation of West Townhouses (Brise Soleil originally only shown at top level)			
			
South Elevation of East Townhouses (Brise Soleil originally only shown at top level)			
			

Addressing Specific Queries

Sample Dwellings Modelled:

Below are plans indicating which sample dwellings were modelled in the overheating assessment. These samples are representative and validate our compliance with the required standards.

Site Plan of the scheme



3D analysis of the units as shown in the Overheating Assessment.

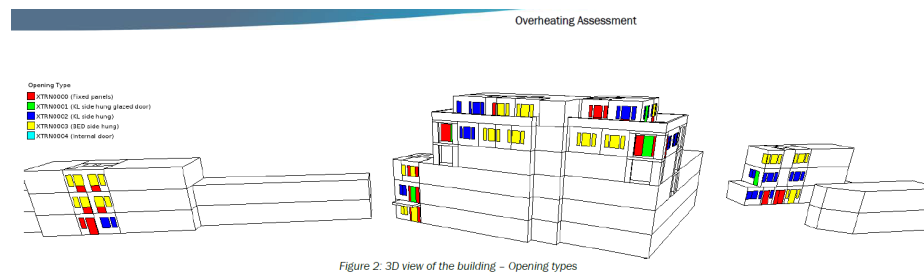
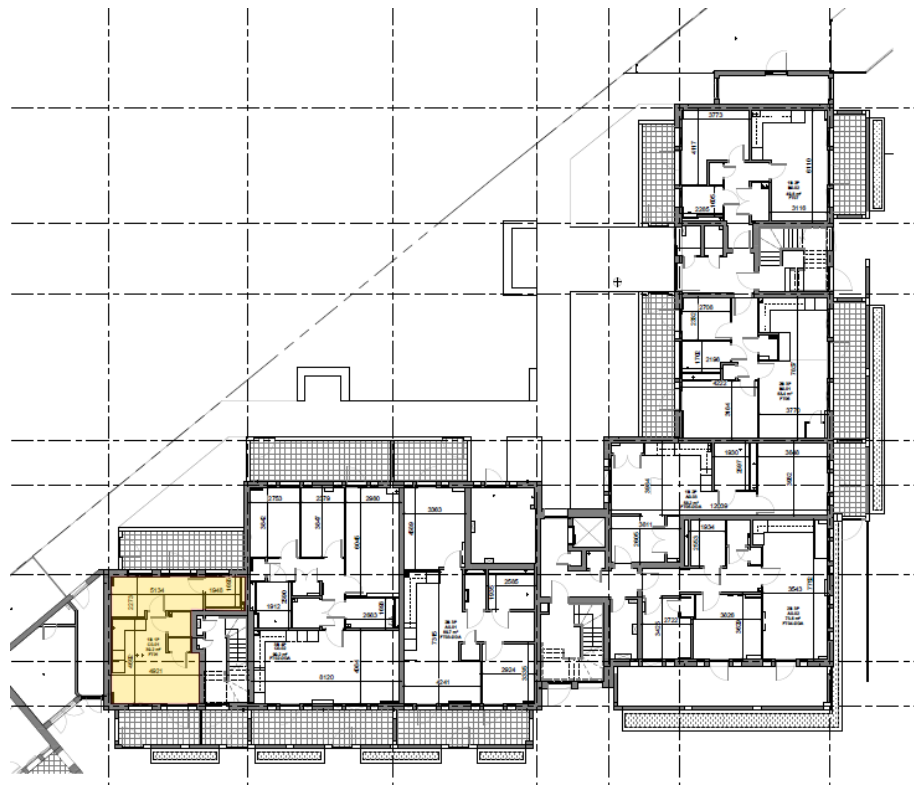
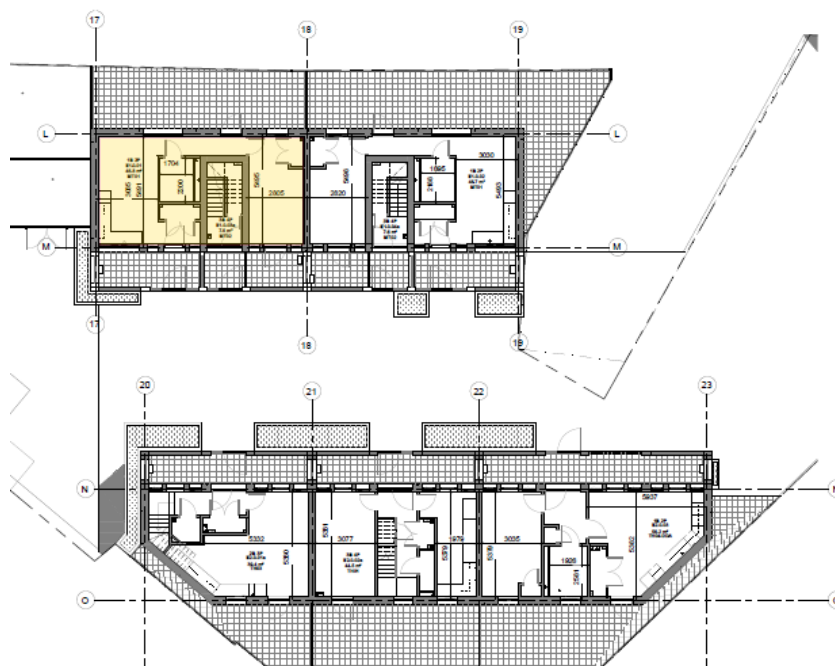


Figure 2: 3D view of the building – Opening types

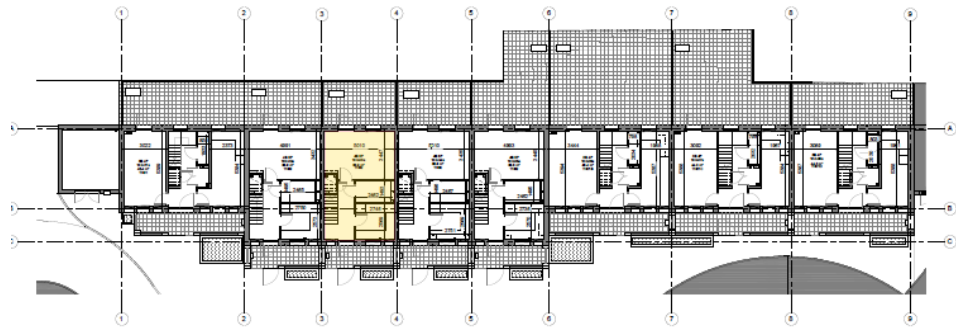
Ground Floor of ABC Block



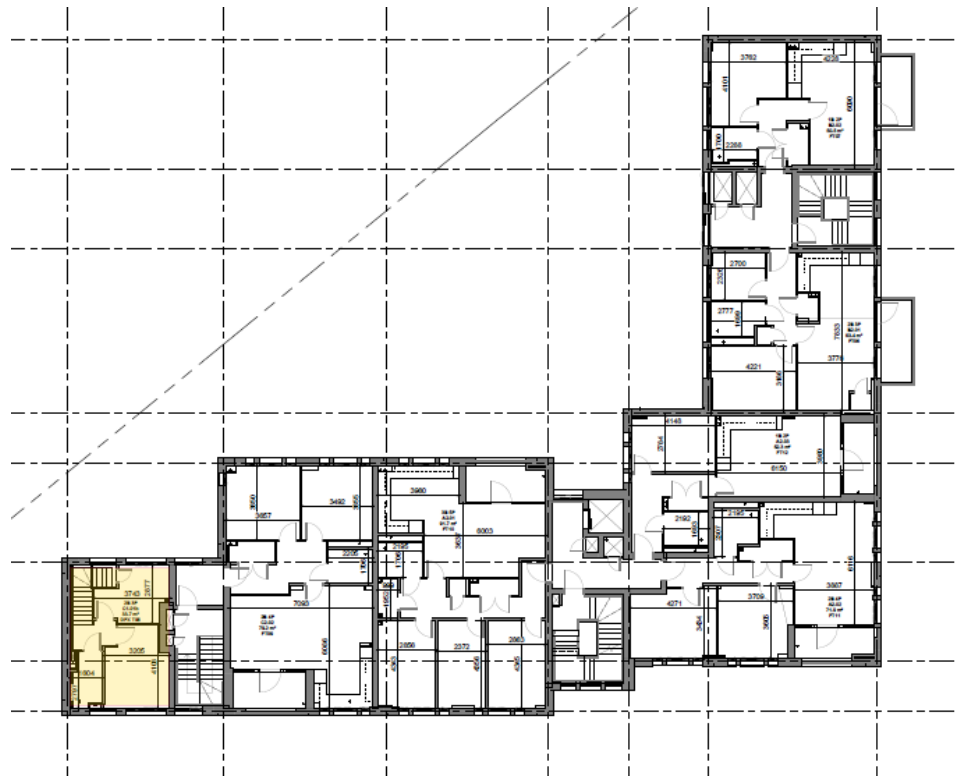
Ground Floor East Townhouses



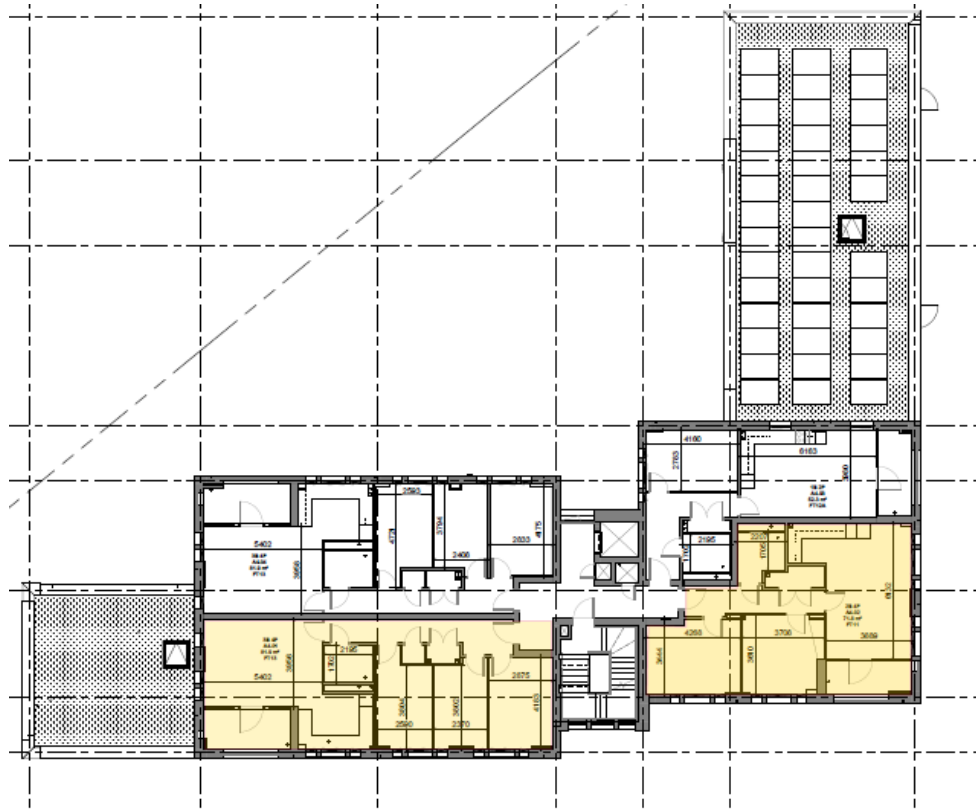
Ground Floor West Townhouses



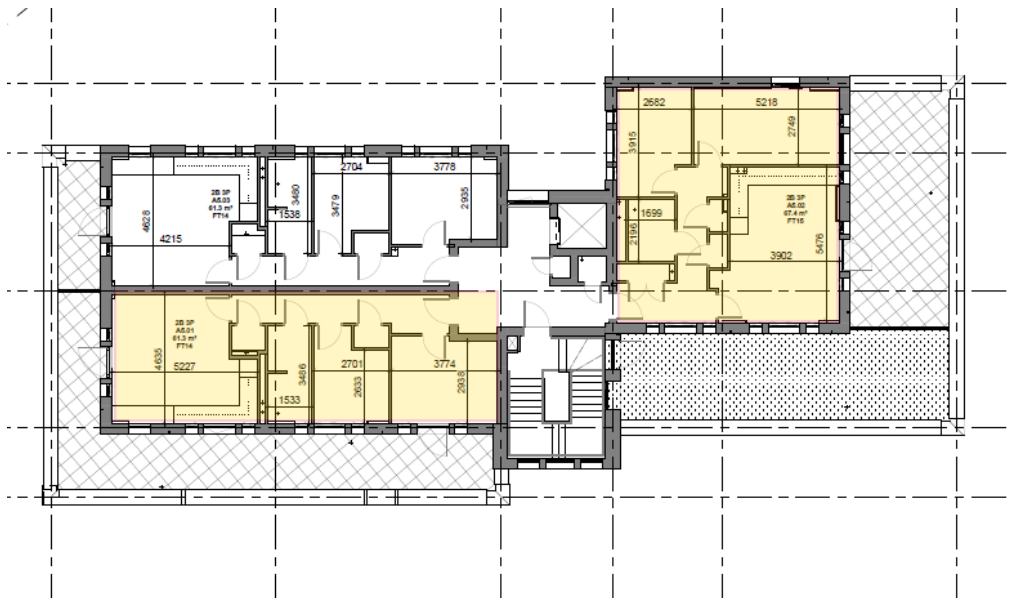
Second Floor of ABC Block



Fourth Floor of ABC Block



Fifth Floor of ABC Block



Overhangs and Recessed Windows:

The overheating assessment and approved NMA justifies the absence of minimal overhangs. The window recesses are 220mm deep as the size of a standard brick. The design achieves the necessary shading and ventilation through assessed means, as demonstrated in our detailed analysis.

Confirmation of Design Features:

While the current design does not include the minimal amount of Brise Soleil as per the initial approved drawings, the revised approach has been validated through our overheating report and approved NMA from November 2023. It confirms that the building meets all relevant overheating criteria and complies with the necessary design standards.

We trust this response clarifies our approach and demonstrates that the updated design without Brise Soleil remains fully compliant with Condition 5.

Approved NMA visuals of the facades.

Approved NMA view from Pulford Road



Approved NMA view from the East Maisonette's



Approved NMA view of Seven Sisters Square

