

Sashed LTD
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London
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1st Floor Flat 3, 15 Westbourne Terrace, London, W2 3UN - **Design, Access and Heritage Statement**

8th March 2024

1. Introduction

This application seeks consent to:-

Replacement of single-glazed timber sashes on the front and rear elevations with new replica sashes containing vacuum-insulated glazing, fitted into existing frames and painted white.

This document should be read in accordance with the proposed and existing drawings submitted as part of this application.

3. The Site and Surroundings: Location

15 Westbourne Terrace is a 5-storey terrace house converted into flats. Westbourne Terrace W2, was built in the 1840s. The terrace property has been listed in 1970 as Grade II under the Planning (Listed Building and Conservation Areas) Act 1990 for its special architectural or historic interest.

The List Entry is for numbers 6-30 Westbourne Terrace, and records the exterior features of the property, but there is no reference regarding the interiors.

The group of terrace houses has matching fenestration and a uniform parapet level. The front façade is clad in stucco and is rich in period detailing with stucco cornicing, stucco channelling to the ground floor and projecting ionic porches. All of the rear storeys are constructed of London stock brick with a mix of timber sash and casement windows.

The property lies within the Bayswater Conservation Area.

3. Background Information

The existing windows are single glazed windows and in various state of repairs depending on the individual window, but in general the frames are all in good condition.

Our client would like to improve thermal and acoustic efficiency by retaining & refurbishing the existing frames and replacing the sashes containing vacuum insulated glazing (VIG).

4. Details of proposed glazing and joinery profiles

The new sashes will feature LandVac 8.3mm vacuum insulated glazing (VIG). The use of ultra-thin profiles in vacuum glazing is particularly advantageous for preserving the aesthetics of heritage buildings. Unlike double glazing, vacuum glazing lacks spacer bars within the glass, eliminating visual disturbances from double reflections and avoiding compromises to fenestration sight lines.

Vacuum glass surpasses typical triple-glazed units in thermal efficiency, representing the most thermally efficient commercially available glass in the UK.

Vacuum insulated glass is light weight, uses less materials, is fully recyclable, and does not use any energy intensive Nobel gases.

Heat transfer by conduction and convection works by particles colliding and transferring energy, as there are no particles in a vacuum heat transfer can only occur by radiation.

Sound waves travel by vibrating through the particles of a medium, such as air or water, from a source to a receiver. So in a vacuum, there is no travel medium.

8.3mm Vacuum Insulated Glazing has Centre-pane U-value of **0.4 W/m²K**.

For comparison (typical U-values):

4mm single glazing has Centre-pane U-value of 5.8 W/m²K.

12mm double glazing has Centre-pane U-value of 1.9 W/m²K

14mm double glazing has Centre-pane U-value of 1.7 W/m²K

24mm double glazing has Centre-pane U-value of 1.1 W/m²K

36mm triple glazing has Centre-pane U-value of 0.8 W/m²K

Recognising the planning teams concerns about thickness of glazing within conservation areas, the proposed vacuum glazing is a mere 8.3mm in thickness and with the visual appearance of single glazing.

Vacuum insulated glass is gaining approval in conservation areas and listed buildings across London boroughs and across England. Should the Westminster planning team wish to see a sample, the agent (Sashed LTD) will be happy to show the planning team and conservation officers.

Westminster has previously approved full planning consent and listed building consent for **Fineo** vacuum insulated glazing (22/03372/FULL / 21/08689/LBC) in a similar listed building. The case officer approved this application with comments on the micro spacers between the panes. **Fineo** has **black** micro spacers every **20mm**, see picture of Fineo below:



This application proposes to use **LandVac** 'heritage' units, which have an overall thickness of 8.3mm, clear toughened float glass, with **55mm** spaced micro pillars which are a subtle semi-transparent **grey** in colour, see picture of LandVac heritage below:



5. Details of proposed joinery profiles and glazing bars

The proposal application is to retain all the existing period frames and to replace only the opening sashes whilst adding additional draft proofing.

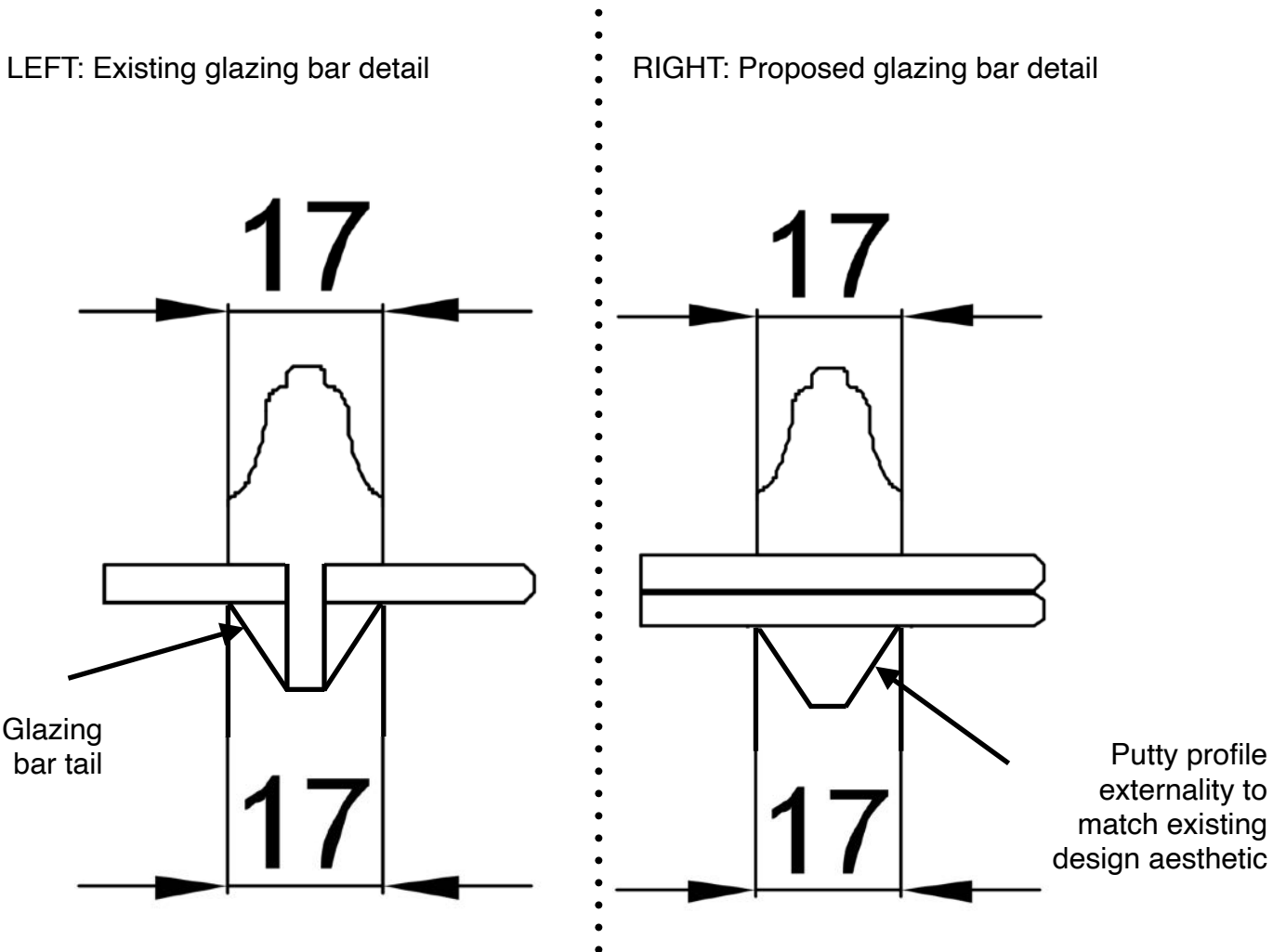
To the front elevation there are three opening-in French casement windows with an arch tilt in toplight, the frames will be refurbished and sashes to be replaced. The arched toplight will be re-glazed with LandVac heritage 8.3mm glazing.



To the rear there are four outward opening (flush frame and sash) casement windows, the frames will also be retained, refurbished and sashes replaced. Additionally there is a sliding sash window to the rear, where the frame is to be retained and refurbished with only the sliding sashes to be retained.

The joinery profiles of the new sashes used to accommodate 8.3mm vacuum glazing, will be identical in external appearance to the existing sashes, rails and stiles are like for like in size (see accompanying drawings).

The structural glazing bar profile will also be identical in appearance to the existing windows; specifically lambs tongue profile glazing bars and beading.



The concept of a glazing bar tail serves as a conventional method for reinforcing a glazing bar and securing the external glazing bead or putty without merely affixing it to the glass surface.

However, it's important to note that passing of a tail from the front to back through the glass is not easily achieved with vacuum glass due to the visibility of the edge spacers and getters. Anticipating any concerns from planning or conservation officers regarding the necessity of a structurally integrated glazing bar rather than a superficial attachment, the proposed new sashes will feature structural glazing bars seamlessly integrated into the

stiles and rails. This ensures that there's no risk of the glazing bar becoming loose or dislodged over time as the glazing bars are all part of one single joinery element.



The picture above shows how the proposed glazing bar is structurally part of the joinery and not 'stuck on'. The picture shows a single joinery element before glazing.

6. Restoration of the original line of fenestration to the front elevation

The three French windows to the front elevation (items 1-3) have been modified over time, items 1 and 2 have a steel frame casement window inserted within the French casement sash towards the top, it is believed that these were added after the introduction of float glass in 1959.

Note: All the windows in the property (front and rear) has float glass, and there is no hand drawn glass present.

Item 3 has lost its glazing bars at the top and bottom, only the centre glazing bar exists.



It is believed the original sashes would have had 4 glazing squares as per item 1, it is proposed that this glazing bar design is restored so that the new sashes are an accurate reflection of the original line of fenestration.

7. Pictures

A: Existing Front Elevation



B: Existing Rear Elevation





Item 8

Item 7

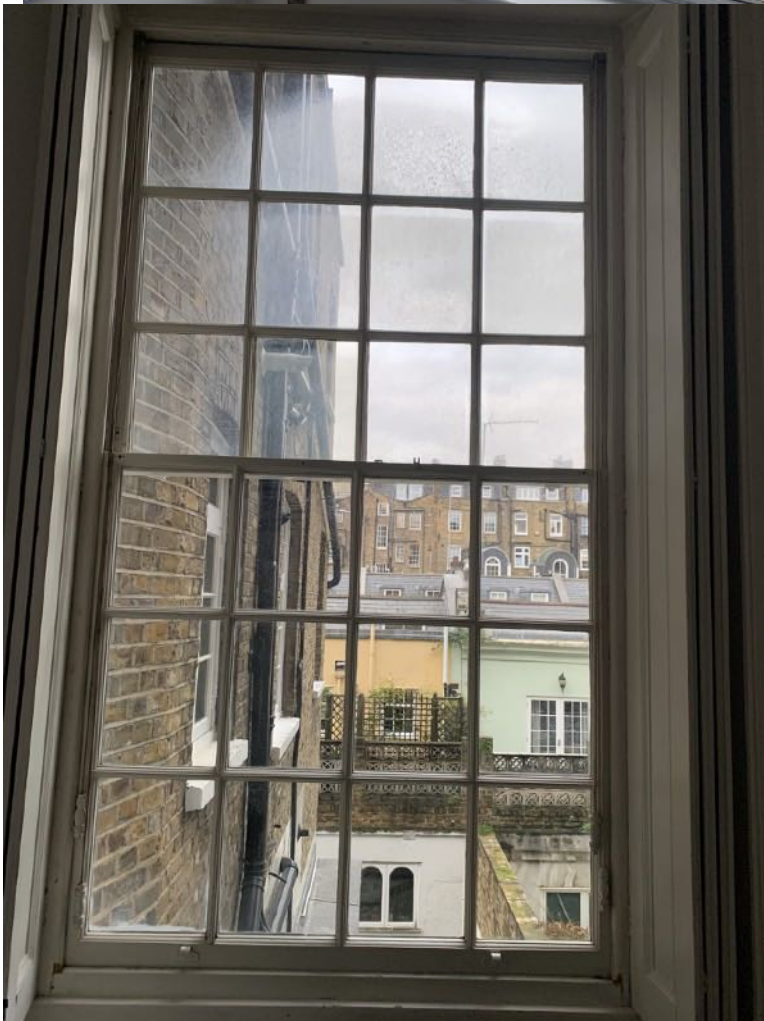
Item 6



Item 6



Item 5



Left - Item 4

6. Sustainability

To reflect the quality and character of the existing building and its location the new windows and doors will be made from Accoya and will be of a suitably high quality. Timber used will be sustainable and FSC certified.

8. Front and Rear Elevation and access

There will be no changes to the front or rear access to the property or any existing access routes.

9. Neighbour Consideration

The proposed windows will maintain the same aesthetics & materials of the existing windows. The new windows will remain 'in-line' with existing street scheme, will replicate the visual appearance of the existing features and have no impact on neighbouring residential housing.

10. Relevant Planning Applications

Application Number: 22/03372/FULL / 21/08689/LBC - Consent granted for replacement sashes glazing Fineo vacuum glass, existing frames to be retained.

Application Number: 23/05720/FULL 23/05721/LBC - Consent granted for replacement windows to the front elevation.

11. Conclusion

The proposed replacement is considerate towards the preserving the character and appearance of the both the listed build and the conservation area. In addition, it maintains the architectural and historic interest of this traditional building, while ensuring good living conditions for the current and future occupiers. Furthermore, it complies with the aims of all addressing climate change and fuel poverty.

Therefore, we feel that there are no planning terms that weigh against this proposal.