



To:	Liam Garrow	of:	MSMCR
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59 Upper Chorlton Road – Verification Testing

1.0 Introduction

Noise measurements were undertaken within a living room and bedroom on the ground floor and first floor bedroom at 59 Upper Chorlton Road, Manchester on Friday 12 May 2023 between approximately 1300 and 1400h. The results of the testing and our comments are presented in this technical note.

AEC previously carried out a noise assessment for the development in October 2021, AEC ref: P4465/PJK/R1a.

These verification measurements were required to confirm that the installed glazing and ventilation strategy complies with the Local Authority requirements for internal noise levels.

2.0 Measured Noise Levels

All measurements were carried out in general accordance with BS EN ISO 16283-3:2016 'Acoustics – Field measurement of sound insulation in buildings and of building elements. Part 3: Façade Sound Insulation'.

External noise level measurements were carried out at the beginning and end of the survey to confirm that the external noise climate was unchanged from AEC's original noise assessment. The free-field ambient noise level was 1dB higher than during the original noise survey external to the elevation facing Upper Chorlton Road.

The resultant internal noise level measurements have been corrected by the above figure and the results are presented in Table 2.1, below, along with the Local Authorities required internal noise level limits for reference purposes.

Please note that all internal noise level measurements were undertaken within unfurnished rooms and, therefore, have been appropriately corrected for a furnished space.

The ventilation strategy within the development was a mechanical ventilation with heat recovery (MVHR) system and trickle vents. The MVHR system was running during all internal measurements and the trickle vents were in the open position.

Table 1 – Measured Resultant Level Difference & Calculated Internal Noise Levels

	Room	Road Traffic Noise, dBL _{Aeq,T}		Criterion Met?
		Measured Noise Level	Criteria	
Ground Floor	Bedroom	25	30	✓
	Living Room / Kitchen	37	35	✓*
First Floor	Bedroom 1	30	30	✓

*2dB is considered within acceptable measurement tolerance

As identified above, all rooms met the requirements. The ground living room / kitchen was 2dB higher, however, this is considered acceptable within measurement tolerance. Furthermore, this was due to the MVHR system which was understood to not be balanced at the time of testing.

In relation to maximum noise levels in the bedroom, maximum noise levels were no greater than $41\text{dB}_{\text{L}_{\text{Amax,F}}}$ during the measurements and, therefore, the requirement to not exceed $45\text{dB}_{\text{L}_{\text{Amax,F}}}$ during the night-time period would be met.

Based on the above, the internal noise levels are within the required limits and hence the glazing and ventilation strategy is suitable and performing as expected.

Yours sincerely



Ross Chamberlain

Checked by: 