

16 December 2020

Ref: 21784.201216.L1

Annette Schmidt Simon Smith and Michael Brooke Architects No 3 Scout Lane London SW4 0LA

Dear Annette,

21784: 16-18 HATTON GARDEN, LONDON, UK

The purpose of the following letter is to establish the noise impact of an existing plant unit installation at 16-18 Hatton Garden, London, UK. The plant installation consists of 2 No. Mitsubishi FDC125VNA-W air conditioning units which are understood to have replaced three previously installed units. They are positioned on the North side of the 16 -18 Hatton Garden rear roof as shown in the figure below.



Figure 1: Plant installation and noise measurement location on rear property roof (plant units enclosed within dashed red lines, noise measurement position highlighted with blue hollow circle)













Two automated 10 minute noise measurements were undertaken at the property between 09:14 and 09:39 on 09/12/2020, with the microphone affixed to the fire escape staircase railing, as shown in the figure above. The microphone position was chosen to be approximately equidistant from all the existing plant installations. The first measurement was conducted with the plant units switched off, and then the measurement was repeated with the air conditioning units in operation at full power.

Background levels observed during the surveys were similar and would be expected to be representative of the typical background noise profile. There were no adverse weather conditions which could affect the results, and the predominant source of background noise observed during the survey was plant noise from other units installed on the roof.

The $L_{Aeq: 1min}$, $L_{Amax: 1min}$, $L_{A10: 1min}$ and $L_{A90: 1min}$ acoustic parameters were measured throughout the duration of both surveys. As the impact of the two Mitsubishi Air conditioning units on the background noise profile is being assessed in this report, the $L_{Aeq: 1min}$ and $L_{A90: 1min}$ are of most importance. Consequently, these parameters are presented in the measurements results table below.

Measurement	Representative background noise level LA90 dB(A)	Average ambient noise level L _{Aeq} dB(A)
Air conditioning units switched off	63	64
Air conditioning units switched on	63	64

Table 1: Measured noise levels with air conditioning units both in, and not in operation

As can be seen from the table above, there is no discernible difference between the ambient and background noise levels with the new Mitsubishi air conditioning units switched on and these same levels with the units switched off. As such, there is no reason to believe that Mitsubishi FDC125VNA-W air conditioning unit installation would have an adverse impact on the amenity of any nearby noise sensitive receivers.

We trust that the above information is sufficient with regards to answering the key issues raised.

Yours sincerely,

John Gray

KP Acoustics Ltd