

Roy Stevens  
Archer Architect  
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E1 6JJ  
(By e-mail)

21<sup>st</sup> August 2007

Dear Roy,

Project reference: 8-10 Hatton Garden, London, EC1N  
Our reference: PAC-06-0069-LT2

Further to our 'Environmental Noise Survey & Environmental Noise Criteria for New Mechanical Services Plant' report, reference PAC-06-0069-RP1, dated 30<sup>th</sup> January 2007 the noise emission at the identified noise sensitive receptor has been calculated from plant serving the building at ground and roof level.

Using the noise data provided in revision B of the mechanical equipment schedule for the VRV fan coil units and extract fan plant received on the 8<sup>th</sup> August 2007, we have calculated indicative noise levels at the Mitre Public house which has been identified as having residential windows at the second / third floor level.

The intermittent operational nature of the cooling equipment assessed in this investigation is allocated with a penalty of 5dB as discussed within our report. This is a reference to BS4142:1997 'Method for rating industrial noise affecting mixed residential and industrial Areas'.

Our assessment findings indicate that uncontrolled noise levels would be in excess of the limiting plant noise specification as stated in our report. Therefore we detail necessary noise control measures to allow proposed equipment to operate freely at the most onerous time, between 07:00 – 23:00 hours.



## Roof Plant

The following equipment has been considered:

Ref.	Manufacturer	Model	Classification	Noise Output
CU01	Mitsubishi	PUMY-P140YHM	Outdoor VRV Fan Coil unit	53 dB(A) @ 1m
CU02	Mitsubishi	PUMY-P140YHM	Outdoor VRV Fan Coil unit	53 dB(A) @ 1m
CU03	Mitsubishi	PUMY-P140YHM	Outdoor VRV Fan Coil unit	53 dB(A) @ 1m
CU04a	Mitsubishi	PUMY-P100YHM	Outdoor VRV Fan Coil unit	53 dB(A) @ 1m
CU04b	Mitsubishi	PUMY-P100YHM	Outdoor VRV Fan Coil unit	53 dB(A) @ 1m
EF01	Nuaire	XS12 PR/FR	Roof Mounted extract fan	Outlet Lw of 65 dBA *

\* Note. The manufacturer has advised the sound power noise data in octave bands for this assessment. The overall sound power level (Lw) has been calculated for each unit to allow the uniform projection to the nearest receptor point (Mitre Public house).

Two units CU04a and CU04b, in equipment schedule Revision B dated June 2007, have replaced the single CU04 unit previously specified. Units CU04a & b offer a saving of 500mm in height over CU04 and therefore it is our consideration that the required height of the plant screen can be reduced.

For the roof plant, a screen 500mm higher than the outline of the plant is required. This should fully wrap around the roof plant area. The screen can be of any solid material, however if there is a need for airflow across the screen, single bank acoustic louvres may be used. An engineered acoustic screen system could be procured from a supplier such as IAC Ltd (01962 873000), Caice Acoustic Air Movement (0118 987 6666), Galloway Acoustics (01924 498818) or equivalent. We would be pleased to review details of the screen proposal for this area.

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Robert  
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I trust the above comments are clear, however should you wish to discuss any aspect further please do not hesitate to contact us.

Yours sincerely,

A handwritten signature in black ink, appearing to read 'S. Chinery', with a stylized flourish at the end.

Steven Chinery

CC Richard Hatter of Brookspace PLC and Matthew Jared of RYB Konsult