

Ref: AS7569.170914.L1

14 September 2017

Mr M Brewer  
CgMS  
140 London Wall  
London  
EC2Y 5DN

Dear Matt

**AS7569 THE GYM GROUP - BLOOMSBURY**

**Attenuation of Tonal Fan Noise**

Clarke Saunders Associates has visited site to undertake measurements of noise associated with plant serving the gym on Corman Street, London WC1N 1HB in response to reported complaints over noise. A distinct tonal noise has been identified radiating from plantroom ventilation ductwork.

Measurements showed that there was a clear tone within the 400Hz 1/3 octave frequency band, calculated to result in a sound pressure level of 51dB at the nearest receptor. Overall, ventilation noise is expected to be around 49dB(A) at receptor.

As the daytime background level in the area is around L<sub>90</sub> 55dB(A), we would expect the night-time background level to be around 45dB(A). The intent is, therefore, to reduce overall noise to 40dB(A) or less, in accordance with Camden's normal requirements, and to control tonal elements such that they are imperceptible at the receptor location.

Initially, The Gym Group should take appropriate action to identify the source of this tone. This might involve carrying out some maintenance work to see if there is anything that needs rectifying/replacing.

Where any rectification does not make sufficient improvement, it will be necessary to fit a sound attenuator within the duct. A performance specification has been issued to The Gym Group for an attenuator that would be appropriate for controlling the current levels of noise. This can be reviewed and amended where maintenance works are found to be partly successful in reducing noise.

We trust that this is of assistance and is sufficient for your current requirements.

Yours sincerely  
for CLARKE SAUNDERS ASSOCIATES

[Redacted Signature]

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