HT17797 25 June 2013

St Georges Court

Roof Plant Screen

There are several items of building services plant proposed for installation on the roof of St Georges Court in London. The site lies within the London Borough of Camden. We understand that the requirements of Camden Council for plant noise emissions are as follows:

"Noise levels at a point 1 metre external to sensitive facades shall be at least 5dB(A) less than the existing background measurement (LA90), expressed in dB(A) when all plant/equipment are in operation. Where it is anticipated that any plant/equipment will have a noise that has a distinguishable, discrete continuous note (whine, hiss, screech, hum) and/or if there are distinct impulses (bangs, clicks, clatters, thumps) special attention should be given to reducing the noise levels from that piece of plant/equipment at any sensitive façade to at least 10dB(A) below the LA90, expressed in dB(A)."

On the basis of the above and our survey results we thus propose the following plant noise emission limits to be achieved at 1m from the façades of the nearest neighbouring buildings, assuming the plant has no tonal qualities:

Position	Noise Emission Limits to be achieved at 1m from neighbouring windows	
	Daytime (07:00 – 23:00)	Night-time (23:00 – 07:00)
1	53	49
2	50	46

In order to achieve these noise levels various attenuation measures must be applied to the roof top plant. Air handling units and extract fans will have atmospheric attenuators installed and the chillers will be installed behind an acoustic screen to limit noise to neighbouring properties such as the hotel to the North. This screen is to be constructed from an imperforate barrier up to the height of the installed chillers and shall be as indicated on the Architect's drawings such that there is no line of sight to any properties on Bloomsbury Way or Bury Place. A low level opening for airflow may be constructed with the introduction of a secondary acoustic panel in front that is installed to twice the height of the opening.