

Application No:	Consultees Name:	Received:	Comment:	Response:
2024/5807/P	Lancelot de Freitas	27/01/2025 12:04:22	INT	<p>From our observations we recognise the following facts which are affecting the lives of the occupants of the lower-level flats in the adjacent building at 36 Tottenham Street and 4 Tottenham Mews.</p> <p>The subject retrospective planning application relates to three heat exchangers located within the light-well serving 77-79 Charlotte Street. The units are installed near the bottom of the light-well which measures 1.8 by 6.2 metres on plan and which is approximately 16. metres deep measured from the top of the parapet wall to the floor of the light-well.</p> <p>The three heat exchangers are a Daikin R32 Inverter, a Daikin DRV IV Inverter and a Daikin DRV IV Loop. According to data sheet they have noise levels of 48., 58. and 58. dbA respectively.</p> <p>There are no figures given for the heat output from the units as this is normally not relevant as they vent to open air but here the three units vent to an enclosed light-well area which is void of any meaningful natural ventilation. Furthermore, the units blow directly to the neighbouring windows which are in close proximity. We do note from the data sheets that the two larger units have a stated cooling capacity 22.4 kW and power input of 6.25 kW each whilst the smaller unit has a cooling capacity of 10.3 kW and a power input of 3.23 kW. We would expect the heat output from the heat exchanger to reflect the cooling capacity.</p> <p>The above confirm that we have two problems, one of noise output and the other of heat output.</p> <p>NOISE LEVEL</p> <p>The three units are approximately one to two metres away from the nearby bedroom windows depending on the units and windows being considered.</p> <p>Two of the three units are mounted directly opposite to and facing the bedroom windows. The walls on which two of the units are mounted are parallel to the windows and so the sound is directed to the windows and can be expected to be reflected back and forth between the windows and the wall. What this does to the noise level in relation to the quoted emitted noise level from the units is not known but it must act to increase the sound level.</p> <p>HEAT</p> <p>In this deep light-well with minimum air circulation, during the hottest periods there are heat exchangers pumping out heat directly to the nearby windows.</p> <p>RECOMMENDATION</p> <p>We conclude that this space is not suitable to mount these cooling units due to the limited space available for dissipation of noise and heat generated by the units.</p>