



105 Field End Road Eastcote, Pinner HA5 1QG, Ground Floor Restaurant Unit
Noise & Odour Mitigation proposals 12 October 2020

References:

NRG Consulting Noise Assessment April 2020
Kitchen Odour Risk Assessment Project No 9617.S April 2020
Argent Architects Drawings TPS02/P2, TPS03/P2, TPS04/P2

The above reports were commissioned to inform the design & location of Plant Equipment at the application site.

The following recommendations were selected to achieve the necessary acoustic and air quality performance:

Acoustics:

Ref. Section 6 NRG Noise Assessment⁵

6.1.1 Kitchen extract fan case breakout

"the fan should be located inside the building and underneath the roof; **or a suitable acoustic enclosure should be installed, such that it provides 29dB(A) of attenuation**".

An acoustic enclosure is proposed to be constructed around the fan units at the base of the external extract duct. This enclosure will comprise of 20mm render on cementitious board on a metal frame with 100mm mineral wool infill within the framework. An access panel will be formed using an external grade fire door, cut down to size to suit the required opening size.

Ref. Drawings TPS03/P2, TPS04/P2 TPS05/P1

The figure below (Fig 1.) is an excerpt from TPS04 and shows the required enclosure in place around the base of the extract fan.

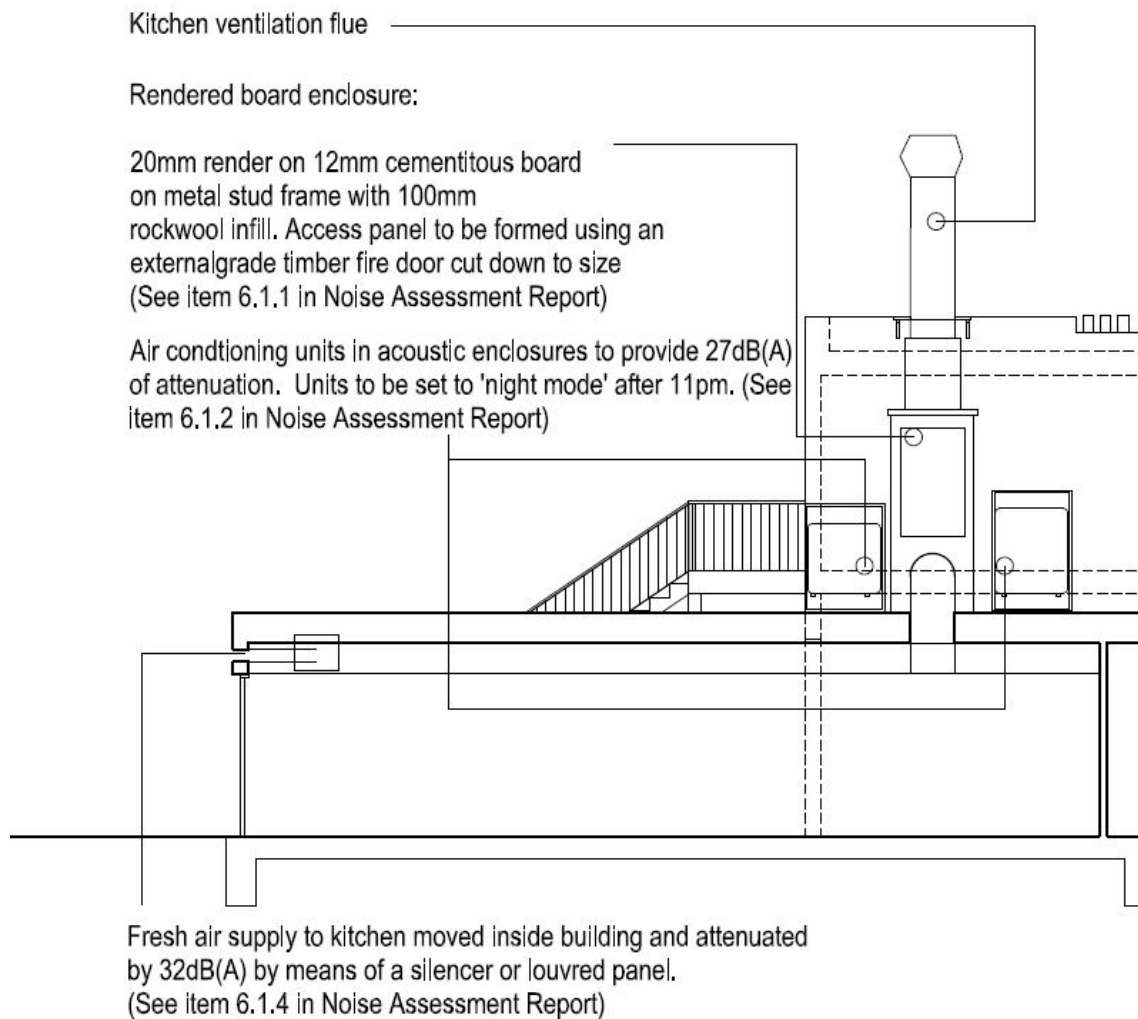


Fig. 1

6.1.2. Air conditioning units

"A suitable enclosure should be installed around the units to provide 27dB(A) of attenuation and it is suggested that the units should be set to 'Night Mode' after 11pm, which provides a further 7dB(A) decrease in sound levels."

These measures can be seen on the above drawing excerpt and are featured on drawing TPS03 also.

6.1.3. Restaurant extraction fan

"It is suggested that the system is redesigned such that the fan is replaced with alternative fan that is quieter, or utilising multiple silencers that would provide enough attenuation to total 36dB(A) of reduction when combining all elements."

Restaurant extraction fan (behind) moved inside building
Fan to be either replaced or combined with new silencers
to achieve 36 dB(A) sound reduction, (See Item 6.1.3 in
Noise Assessment report)

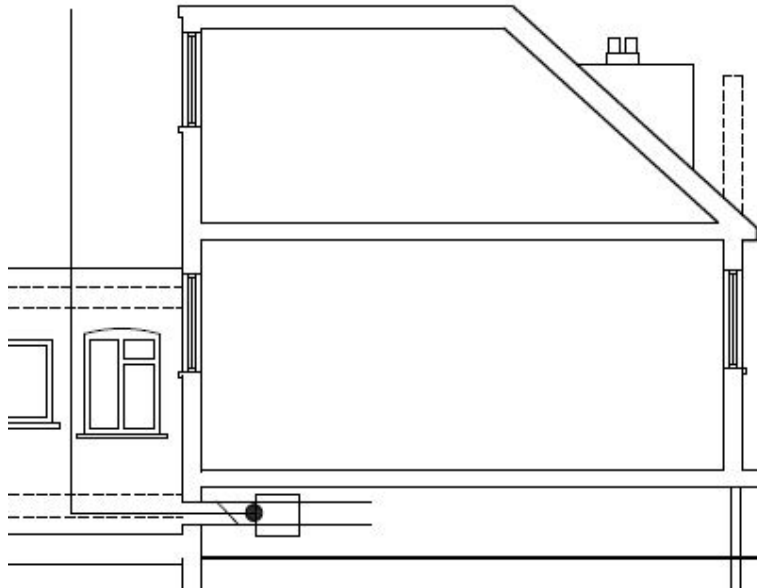


Fig. 2

The above excerpt from drawing TPS04/P2 features the recommendations of this paragraph.

6.1.4 Kitchen fresh air supply fan

"The fresh air kitchen supply was measured to be 76dB(A) at 2.5m. The fan should be moved inside the building and the sound levels need to be attenuated by 32dB(A) by means of a silencer or a louvered panel. If this is not possible, the fan should be replaced with another that provides a sound pressure level of 52dB(A) at 1m."

The former of these measures is featured on drawings TPS03/P2 and on TPS04/P2 as can be seen on Fig. 1 above.

Air Quality

Ref. Pholrum Kitchen Odour Risk Assessment April 2020 Section 2.13:

2.13 EMAQ+ provides guidance on what a High Level of odour mitigation might include:

- "1. Fine Filtration or ESP followed by carbon filtration (carbon filters rated with a 0.2 -0.4 second residence time);
2. Fine Filtration or ESP followed by UV ozone system to achieve the same level of control as 1."

The second of the above recommendations is featured on the application drawings