



Initial Ambient Noise Test Summary and Calculations

Name/Address of premises of test

12 Milton Road
Gravesend
DA12 2RE

Date of Survey:

21st – 22nd May 2026

Test Conducted by:

Corey Dillon
M&E Consulting Engineer

Instrumentation:

Environmental noise measurements were undertaken using a:

- Nova Environmental Sound Level Meter (Class 2)

The equipment was calibrated in accordance with the manufacturer's recommendations and utilised for continuous environmental noise monitoring throughout the survey period

Survey Methodology:

Continuous ambient noise monitoring was undertaken between 21st and 22nd May 2026 to establish representative background sound levels at the site and surrounding residential receptors.

Measurements were carried out using a portable microphone positioned within the rear external area of the premises. The environmental noise monitoring equipment recorded sound levels continuously over a six-hour period on each survey day, with hourly statistical noise data logged for subsequent analysis.

The measured data was used to establish the prevailing background noise climate and to assess the potential impact of the proposed kitchen extract ventilation system.

The assessment has been undertaken with reference to the principles contained within: EMAQ/Defra – Control of Odour and Noise from Commercial Kitchen Exhaust Systems (2018 Update) which recommends that noise from commercial kitchen extract systems should be controlled such that the rating level of plant noise does not exceed the representative background sound level at the nearest noise-sensitive receptor.

Environmental Conditions:

Milton Road and Wilton Street comprise a mixed residential and commercial environment characterised by relatively low levels of road traffic and pedestrian activity during the monitoring period.

Weather conditions throughout the survey were considered suitable for environmental noise measurement and no unusual acoustic events were observed that would significantly influence the recorded background sound levels.

Measured Ambient and Background Noise Levels

Analysis of the survey data identified the lowest measured background noise levels (LA90,T) to be within the range:

52 dB(A) to 56 dB(A)

during the period:

10:00 hours – 16:00 hours

The representative daytime background noise level adopted for assessment purposes was therefore taken as:

52 dB(A) LA90,T

at the nearest noise-sensitive residential receptor.

Predicted Extract System Noise Levels:

The proposed kitchen ventilation extract system has been assessed at the nearest residential window, located approximately 6 metres from the proposed discharge point.

Based upon the manufacturer's acoustic data and installation arrangement, the predicted operational noise level from the extract system operating at maximum duty is:

35 dB(A)

at the nearest residential receptor.

Assessment Against EMAQ/Defra Guidance:

The EMAQ/Defra guidance recommends that the rating level of noise from commercial kitchen extraction systems should not exceed the representative background sound level at nearby noise-sensitive premises.

The assessment demonstrates:

Description	Noise Level
Representative Background Noise Level (LA90,T)	52 dB(A)
Predicted Extract System Noise Level	35 dB(A)
Margin Below Background Level	17 dB(A)

The proposed kitchen ventilation system is therefore predicted to operate approximately 15 dB(A) - 18 dB(A) below the representative daytime background noise level.

As a result, the operation of the extraction system is not expected to give rise to adverse noise impacts and will remain substantially below the prevailing ambient acoustic environment without the requirement for additional attenuation measures.

Conclusions:

The environmental noise survey has established that daytime background noise levels at the site range between 52 dB(A) and 56 dB(A), with a representative assessment level of 52 dB(A) adopted for the nearest residential receptor.

The proposed kitchen ventilation extract system is predicted to generate a noise level of approximately 35 dB(A) at the nearest residential window, representing a margin of approximately 15 dB(A) - 18 dB(A) below the measured background noise level.

The predicted noise level at the site boundary is below the measured background noise level and is therefore considered to comply with the requirements of BS 4142:2014.

In accordance with the recommendations contained within the EMAQ/Defra Control of Odour and Noise from Commercial Kitchen Exhaust Systems (2018 Update) guidance, the proposed kitchen ventilation system is therefore considered acoustically acceptable and the predicted noise level at the site boundary complies with BS 4142:2014.

It is concluded that the installation and operation of the proposed kitchen ventilation system at 12 Milton Road, Gravesend, DA12 2RE, will not adversely affect the residential amenity of surrounding properties and is unlikely to give rise to complaints associated with plant noise.

Should you require any further information or clarification regarding this assessment, please do not hesitate to contact.

Kind regards

Gabriel Cicconi
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