

Project Address: 57 Wood Street, Earl Shilton, Leicester LE9 7NE

Planning Reference: 25/00614/FUL

Prepared by: Planets LTD/ 4UsElectric Ltd

Date: 17 October 2025

Prepared on behalf of: The Applicant

1. Introduction

This revised Ventilation Statement has been prepared to accompany the *Odour & Noise Clarification Note* and address the latest comments from the HBBC Pollution Team.

The document confirms that the proposed use at 57 Wood Street achieves compliance with:

- **EMAQ 2018** – *Control of Odour and Noise from Commercial Kitchen Exhaust Systems*, and
 - **DW/172** – *Kitchen Ventilation Systems*.
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2. Summary of System Configuration

Component	Specification / Description
Canopy	Wall-mounted stainless-steel canopy (3.5 m × 1.2 m × 0.5 m) positioned directly above main cooking line.
Primary Filtration	Stainless-steel grease baffle filters providing fine-filtration efficiency equivalent to a pre-filter stage.
Carbon Filtration	AirClean reactive carbon panel with 0.2 s residence time (removal > 95 % of odours and VOCs).
Fan Unit	Acoustically-insulated box-type centrifugal fan with electronic speed control, anti-vibration mounts and flexible connectors.
Silencer	In-duct attenuator providing 15–20 dB(A) noise reduction.

Ductwork & Stack

Rigid galvanised-steel duct routed internally and terminating externally through a vertical discharge cowl approximately 1 m above eaves level. Non-restrictive cowl ensures upward dispersion ≥ 15 m/s.

3. Odour Control Assessment

The odour risk has been assessed in accordance with **EMAQ 2018** and classed as **High Risk** (total score ≈ 25 –28).

Accordingly, *High-Level Odour Control* measures have been provided:

- **Fine Filtration Equivalent:** Stainless-steel baffle filters within the canopy capture grease and aerosols prior to carbon filtration.
- **Carbon Filtration:** AirClean panel provides 0.2 s residence time, removing > 95 % of odours and volatile compounds.
- **Maintenance:** Daily wipe-down, weekly filter wash, carbon replacement every 6–12 months.

This configuration meets the **EMAQ H1 requirement** – *Fine filtration or ESP followed by carbon filtration (0.2–0.4 s residence time)* – without the need for a separate ESP unit.

4. Noise Impact Summary

Noise performance has been reviewed per **EMAQ 2018** and **DW/172** guidance.

Acoustic Features

- Acoustically lined box-type fan enclosure
- In-duct silencer (15–20 dB(A) attenuation)
- Anti-vibration mounts & flexible connectors
- Variable speed control for reduced velocity at off-peak hours

Predicted Performance

- Approx. 55–60 dB(A) at 1 m from fan casing
- 15–20 dB(A) attenuation through silencer + duct losses
- Estimated ≤ 40 dB(A) at nearest receptor (~20 m distance)
- Equivalent to **NR25–30**, compliant with EMAQ and DW/172 limits for residential receptors

Hence, the system is not expected to generate any adverse noise impact on neighbouring premises.

5. Maintenance Schedule

Frequency	Action
Daily	Clean canopy surfaces and wipe external panels.
Weekly	Remove and wash baffle filters.
Quarterly	Inspect duct and fan for grease or vibration.
Annual	Deep clean of ductwork and fan; replace carbon filter (6–12 months depending on use).

6. Adjacent Premises Information

For contextual understanding, it is noted that, **to the client's knowledge, the upper floor above the neighbouring Indian restaurant is used in connection with the restaurant below**, although this cannot be confirmed.

7. Conclusion

The proposed restaurant/café ventilation design:

- Provides *High-Level Odour Control* per **EMAQ 2018 (H1)**;
- Achieves **NR25–30** noise levels per **DW/172** standards;
- Ensures effective vertical dispersion via a stack 1 m above eaves at ≥ 15 m/s velocity;
- Is fully consistent with the Pollution Team's technical requirements and the approved Class E use.