

MAGGIE LO CATERING SUPPLIES LTD

Designing Planning Project Managing Catering Equipment Ventilation System Furniture Cutlery Crockery

SHOWROOM

MAGGIE LO CATERING SUPPLIES LTD

202-204 BARFORD STREET

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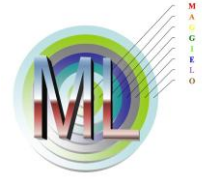
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ODOUR ASSESSMENT REPORT

(For Submission to Environmental Health – Reading Borough Council)

15/04/2026

1. Introduction

This Odour Impact Assessment has been prepared in support of a planning / environmental health submission for a proposed commercial kitchen extraction system at:

102 Broad Street, Reading, RG1 2AX

- The report assesses the potential impact of cooking odours arising from the proposed restaurant use and demonstrates that the ventilation a
-

2. Site Description

The site is located within a **mixed-use town centre environment** in Reading, comprising commercial premises at ground level with potential residential receptors in close proximity.

Sensitive Receptors

- Residential flats nearby
- Nearby commercial units
- Pedestrian areas on Broad Street

Given the urban setting, the site is considered to have **medium to high sensitivity to odour impacts**.

3. Existing Situation

At present, there is:

- No kitchen extraction system installed
- No odour abatement measures

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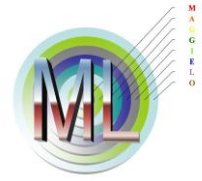
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- No mechanical ventilation

Conclusion:

The current baseline presents a **high potential for odour nuisance** if cooking were to occur without mitigation.

4. Proposed Development

The proposal comprises installation of a full commercial kitchen ventilation system serving a **Chinese-style restaurant (high odour load cooking)**.

5. Ventilation & Odour Control System

5.1 Overview

The system has been designed by a specialist contractor in accordance with DW172 and incorporates a **multi-stage odour abatement strategy**.

5.2 Extraction System

- **Canopies Installed:**
 - 2 × main kitchen canopies (4000mm × 1200mm)
 - 1 × dishwashing canopy
- **Extract Rates:**
 - Canopy 1: 1.372 m³/s
 - Canopy 2: 1.372 m³/s
 - Canopy 3: 0.40 m³/s
- **Ductwork:**
 - Galvanised steel construction (DW144 compliant)
 - Sealed joints and access panels for maintenance

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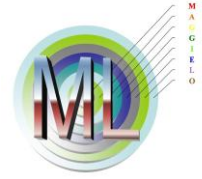
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- **Discharge Location:**
 - Vertical discharge at roof level
 - **Discharge Velocity:**
 - 8–10 m/s (in line with DEFRA guidance for effective dispersion)
-

5.3 Odour Abatement Technology

The system incorporates the following stages:

Stage 1 – Grease Filtration

- Stainless steel baffle filters within canopy
- Removes grease and large particulates

Stage 2 – Pre-Filtration

- Removes finer particulates prior to carbon stage

Stage 3 – Carbon Filtration

- Activated carbon filters
- Designed dwell time: ~0.2 seconds
- Removes odorous gases and vapours

Assessment:

This level of filtration is appropriate for **medium/high odour risk cooking**, consistent with DEFRA recommendations.

5.4 Air Supply System

- Mechanical fresh air supply system
- Provides 70–80% replacement air
- Ensures negative pressure and effective capture of fumes

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6. Odour Risk Assessment

6.1 Odour Source Characteristics

- Cooking type: Chinese cuisine
- Odour classification: **High intensity, grease-laden emissions**

6.2 Mitigation Assessment

Measure	Function	Effectiveness
Baffle filters	Grease removal	High
Pre-filters	Fine particulate removal	Moderate
Carbon filters	Odour removal	High
Adequate airflow	Capture at source	High
High discharge velocity	Atmospheric dispersion	High

6.3 Residual Impact

With mitigation in place:

- **At discharge:** Moderate odour detectable
- **At nearest receptors:** Faint or negligible
- **Overall impact:** Acceptable

7. Compliance with DEFRA Guidance

The system aligns with DEFRA (2018) guidance as follows:

- ✓ Appropriate extraction rates for cooking type

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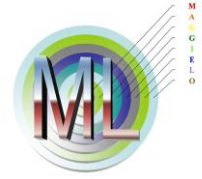
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- ✓ Multi-stage odour abatement (carbon filtration)
- ✓ Adequate discharge velocity (≥ 8 m/s)
- ✓ Proper duct design and maintenance access
- ✓ Suitable for high odour risk category

Conclusion:

The proposed system meets the requirements for a **high standard of odour control**.

8. Maintenance & Management Plan

Effective odour control is dependent on ongoing maintenance. The operator will implement the following:

- **Grease filters:** Clean minimum 3 times per week
- **Canopy & ductwork:** Regular cleaning via access panels
- **Carbon filters:** Replace every 8–12 months or as required
- **System checks:** Routine inspection of fans and filters

A **maintenance logbook** will be kept on-site and made available to Environmental Health Officers upon request.

9. Residual Risk & Mitigation

Residual Risk Level: Low to Medium

Potential risks:

- Filter saturation
- Poor maintenance
- High-intensity cooking periods

Additional Mitigation (if required by Council):

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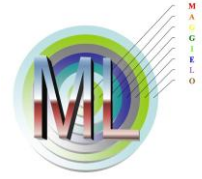
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- Upgrade to higher-grade carbon filters
- Installation of electrostatic precipitator (ESP)
- Increased discharge height

10. Conclusion

The proposed kitchen ventilation and odour abatement system has been designed in accordance with recognised UK standards and best practice guidance.

The inclusion of:

- Adequate extraction rates
- Multi-stage filtration (including carbon filters)
- High-velocity roof-level discharge
- Proper maintenance provisions

ensures that **odour emissions will be effectively controlled.**

It is therefore concluded that:

The development is acceptable in odour terms and is unlikely to give rise to statutory nuisance, subject to proper installation and maintenance.

11. Declaration

This report has been prepared based on the ventilation system specification provided (Maggie Lo Catering Supplies Ltd, 21/2/2026, Design and Specification For Extraction Ventilation System- Proposed Property, 102 Broad Street, Reading, RG1 2AX) and in accordance with current UK guidance and industry standards.