

EXTRACTION, ODOUR AND NOISE CONTROL STATEMENT

**INSTALLATION OF A KITCHEN EXTRACTION SYSTEM, INCLUDING DUCTWORK AND AN
EXTERNAL EXTRACTION FAN TO THE REAR OF THE SHOP**

UNIT 5, 692 UXBRIDGE ROAD, HAYES, UB40RX

Our reference	105_ Extraction, Odour and Noise Control Statement
Date:	3 rd September. 2026
Prepared by:	AM
Checked by:	KS

Introduction

This statement has been prepared in support of the proposed commercial kitchen extraction system at Unit 5, 692 Uxbridge Road, UB40RX

The proposed extraction system has been designed to provide effective extraction of cooking fumes, grease, heat and odours generated by the proposed cooking facilities, whilst minimising potential impacts upon neighbouring properties.

Hillingdon Council confirms that commercial kitchen extraction systems should be properly designed to minimise noise and odour impacts upon nearby surroundings and that full details of proposed extraction systems may be requested as part of the planning process.

The proposed system will incorporate appropriate grease filtration, odour control, mechanical extraction, acoustic treatment and a controlled vertical discharge above the ground-floor flat roof.

The remainder of the statement is set out in the following five sections:

1. Proposed Extraction Arrangement
2. Environmental Health
 - 2.1 Kitchen Canopy/Ventilation Requirements
 - 2.2 Filtration
 - 2.3 Carbon / Odour Control
 - 2.4 Extraction Motor
 - 2.5 Ductwork
 - 2.6 External Roof-Mounted Arrangement
 - 2.7 Noise and Vibration Control
 - 2.8 Final Termination
- 3.0 System Operation
- 4.0 Visual Appearance
- 5.0 Conclusion

1.0 Proposed Extraction Arrangement

The extraction system will serve the cooking equipment located within the proposed service kitchen.

The internal extraction arrangement will comprise the following principal stages:

- Primary grease filtration
- Secondary grease filtration
- Final/bag filtration
- Odour-control/carbon filtration
- Mechanical extraction fan
- Ductwork to roof level
- Acoustic silencer
- Vertical discharge terminal/cowl

The system is intended to operate whenever cooking extraction is required.

The proposed external arrangement will terminate vertically above ground-floor flat roof rather than discharging horizontally across the roof. This provides a controlled upward discharge and avoids directing extracted air horizontally towards adjoining properties.

2.0 Environmental Health

The proposed development will carry out installation of a new canopy which will be ducted through the ducting facilities. These facilities include Odour Control System, Filtration System, Noise Control System, Vibration Control System and Ventilation System which will minimize smell, noise and fumes. The Extractor Duct will be installed.

2.1 Kitchen Canopy/Ventilation Requirements

- A canopy, which will extend over the cooking equipment by at least 225mm, will be provided to collect the cooking fumes and direct them into the ductwork.
- The canopy will include a cleanable channel around the lower edge to collect condensate.
- The canopy will be of sufficient height to enable easy working, on the ranges, whilst low enough to entrain all odours/steam generated by the cooking.
- The canopy will be constructed from stainless steel to enable easy cleaning.
- The canopy will be fitted with primary grease filters, of a re-usable wire-wool/mesh type design.
- Primary grease filters will be cleaned daily.

The final canopy dimensions and required extraction rate will be confirmed by the specialist kitchen extraction contractor in accordance with the selected cooking equipment and canopy design.

2.2 Filtration

The extraction canopy will incorporate primary and secondary grease filtration to remove grease and cooking particulates from the extracted air.

A final/bag filter stage will provide additional particulate filtration before air passes through the odour-control stage.

The proposed filtration arrangement is:

Cooking Equipment → Primary Grease Filter → Secondary Grease Filter → Final/Bag Filter → Odour/Carbon Control → Extraction Fan → Vertical Duct → Acoustic Silencer → Discharge Terminal

- A secondary re-usable wire-wool/mesh type design grease filter will be fitted, in the ductwork before the odour control/filtration.
- The secondary grease filter will be cleaned weekly.
- A final grease filter of the disposable bag-type design will be fitted.
- The final bag-type grease filter will be replaced every 1 to 2 months.

Please refer to Figure-01 for Indicative Kitchen Ventilation System

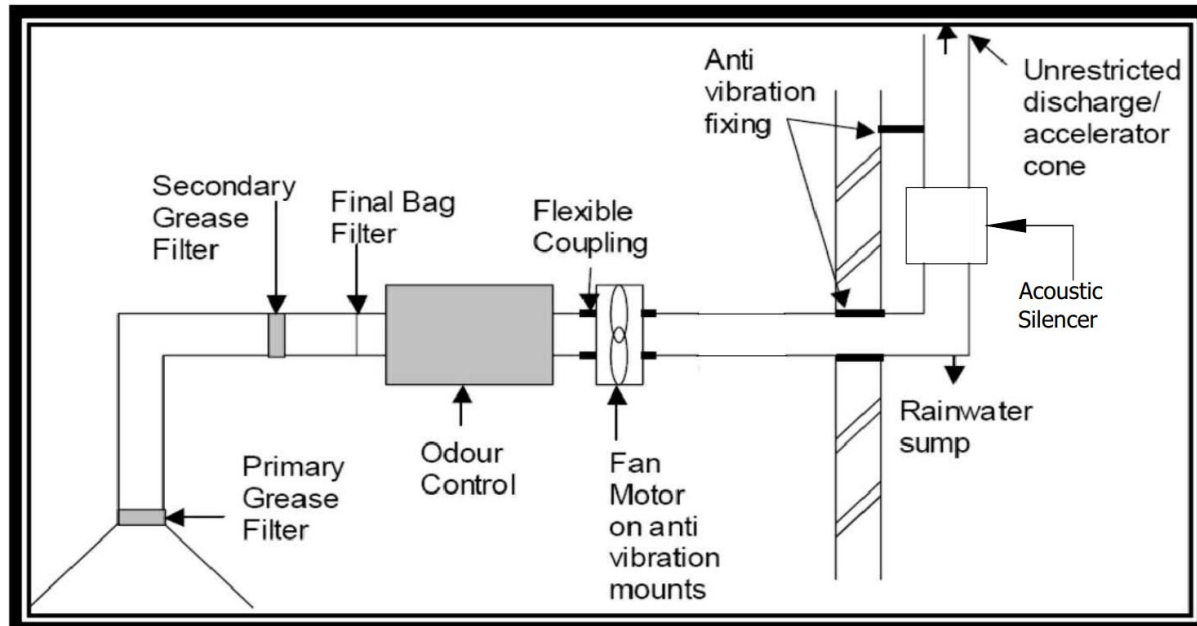


Figure-01 Indicative Kitchen Ventilation System

2.3 Carbon / Odour Control

A grease and odour control system will be used which includes:

- A kitchen canopy incorporating primary grease filters.
- Ductwork to final termination, incorporating secondary filtration/odour control techniques, an internally positioned extraction motor and if necessary an acoustic silencer.
- A discharge at a position and velocity to ultimately disperse and dilute the residual odours, so as not to cause a loss of amenity.
- Activated carbon filter type odour control will be used. Activated carbon filters adsorb gaseous odours, usually volatile organic compounds, onto the filter medium.
- Activated carbon filters will be replaced every 6 months; either by disposal or return to the manufacturer for rejuvenation.
- The internal surfaces of the filter housing shall be cleaned monthly.
- To achieve a high specification odour control system, reputable Ventilation/Heating Engineer with experience and knowledge of odour/grease control systems will be used.

2.4 Extraction Motor

- The extraction motor will be correctly rated for the application and at the correct speed/flow rate to achieve optimum performance of the filtration.
- The extraction motor will be cleaned and maintained in accordance with the manufactures specifications.
- The motor controller will be located in the kitchen to achieve the optimum flow rates of the odour control system.
- Noise control will be implemented as in-line acoustic absorbers or external acoustic insulation. The noise from the system will not exceed 43 dB Lae (5min) measured 1m from any external part of the system.

2.5 Ductwork

The extracted air will be conveyed through dedicated mechanical extraction ductwork from the kitchen to the external discharge point.

The proposed external duct will rise vertically through the ground-floor flat roof.

For planning purposes, an indicative duct diameter of:

Ø400 mm

has been allowed for.

The final duct diameter will be determined by the required extraction airflow and specialist ventilation calculations.

- The ductwork will be constructed from suitable non-combustible material and appropriately sealed to prevent leakage.
- The ductwork will be supported independently and securely, with suitable weatherproofing at the roof penetration.
- A well-engineered duct design will be used at all times.
- The number of bends in the ducting will be minimized.
- The ducting will have smooth internal surfaces.

2.6 External Roof-Mounted Arrangement

The extraction duct will penetrate the flat roof and terminate vertically above roof level.

The proposed external arrangement comprises:

- vertical extraction duct
- carbon/odour-control filtration equipment
- extraction fan
- acoustic silencer
- discharge terminal/cowl
- suitable support frame incorporating anti-vibration measures where required

The equipment will be positioned to minimise its visual and amenity impact and will be located away from roof edges where practicable.

The proposed discharge will be directed vertically upwards.

2.7 Noise and Vibration Control

The extraction system will incorporate measures to minimise noise and vibration.

These measures will include:

- selection of an appropriately sized and acoustically efficient extraction fan
- acoustic silencer
- anti-vibration mounts/isolators
- flexible duct connections where appropriate
- appropriate equipment supports
- ductwork designed to avoid excessive air velocities and turbulence
- regular maintenance of the fan and associated equipment

The final fan sound power/sound pressure data and acoustic performance will be provided by the specialist supplier. The system will be designed and operated so that noise does not cause an unacceptable adverse impact upon neighbouring occupiers.

- Noise control will be implemented as in-line acoustic absorbers or external acoustic insulation. The noise from the system will not exceed 43 dB Lae (5min) measured 1m from any external part of the system.
- The system will also include suitable anti vibration mounts and flexible couplings to prevent structure borne vibration.

2.8 Final Termination

The ducting will link with the main extraction duct with termination point at rear of the property inline with the specialist's instructions and Approved Document "J"

3.0 System Operation

The extraction system will be operated whenever cooking activities requiring mechanical extraction are undertaken.

The system will be switched on before cooking commences and remain operational for an appropriate period following cooking to clear residual heat, grease and odours from the extraction system.

The extraction system will not be operated unnecessarily when cooking equipment is not in use.

4.0 Visual Appearance

The external extraction equipment will be finished in a suitable neutral colour/material and will be designed to minimise its visual impact.

The equipment will be positioned on the existing ground-floor flat roof and will comprise a compact vertical arrangement.

The principal external components will be:

vertical duct → carbon filtration → fan → acoustic silencer → vertical discharge cowl

The equipment will be supported on a suitable frame with anti-vibration measures.

The proposed arrangement is illustrated on the submitted roof plan, sections and extraction system drawings. Please see Figure-02 for the roof mounted equipment. We have attached proposed front elevation as Figure-03

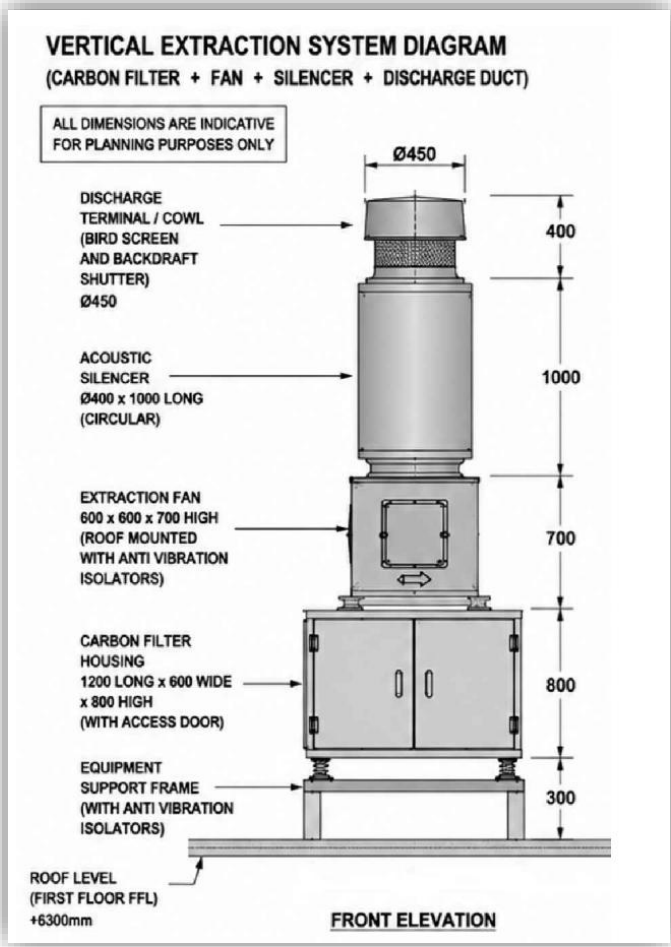


Figure-02 Roof Mounted Equipment.

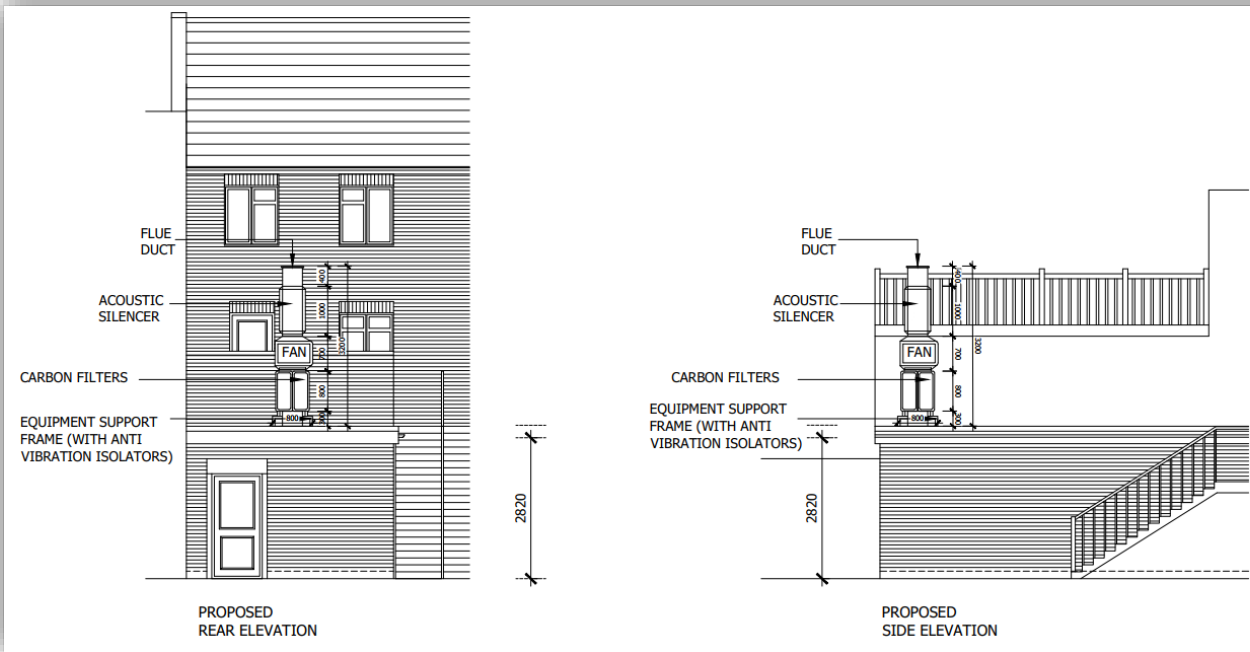


Figure-03 Proposed Front Elevation

5.0 Conclusion

The proposed extraction system has been designed around a multi-stage filtration and vertical discharge arrangement intended to provide effective extraction of cooking fumes, grease and odours while minimising potential impacts upon neighbouring properties.

The system incorporates grease filtration, final particulate filtration, carbon/odour control, mechanical extraction, acoustic attenuation and a vertically directed discharge.

The external equipment will be appropriately supported and isolated to minimise vibration and noise transmission.

The final equipment selection, extraction duty, acoustic performance and filter specifications will be confirmed by a suitably qualified specialist extraction contractor prior to installation.

The proposal therefore provides a controlled and maintainable extraction arrangement appropriate to the proposed commercial kitchen use.