

VENTILATION + EXTRACTION STATEMENT

**DISCHARGE OF PLANNING CONDITION 8 FOLLOWING PLANNING
APPROVAL NO: 126882/FO/2020**

**CHANGE OF USE OF GROUND FLOOR FROM RETAIL (CLASS USE
A1) TO CAFÉ/RESTAURANT AND HOT FOOD TAKEAWAY (CLASS
USE A3/A5) INCLUDING SITING OF FLUE TO REAR.**

**189 BURNAGE LANE
MANCHESTER
M19 1FE**

Introduction

This statement has been prepared to Discharge Condition 8 relating to a Planning Application approved (App No: 126882/FO/2020) for the 'Change of Use of Ground Floor from Retail (A1) to Café/Restaurant and Hot Food Takeaway (A3/A5) including Siting of a New Extractor Flue to Rear'. This document also sets out the criteria for new extraction flue, ducting and canopy.

This document sets out the design principles behind the planning application in relation to the site and its wider environmental context, including: -

- A description of the purpose of the development.
- How the design meets the council's design objectives.
- An explanation of the design principles and concepts.
- A description of the accommodation proposed.

Consultations

During the outline feasibility stage of this project consultation was not sought but can be on-going once the application is submitted.

Kitchen Ventilation/Extraction

The detailed design and installation of the ventilation system will be undertaken by a consultant and contractor specialising in commercial kitchens. The final cooking line has not yet been determined but the performance characteristics of the extract system will be in accordance with HVCA Standard DW172 and DEFRA Guidance on 'Control of odour and noise for commercial kitchens. This statement sets out the performance objectives of the system, namely that the ventilation and extraction system are to ensure that there is no disturbance, nuisance, or loss of amenity to nearby premises as a result of fumes, odour, food particular or noise.

The system performance is to be such that the extract rate of air from the kitchen always results in the ancillary areas of the Takeaway being under negative pressure. Incoming fresh air is to be sufficient to replace that displaced by extraction. This will ensure that fumes/smells are evacuated through the extract system rather being vented through windows and doors.

The Premises and Consumption

This application is to determine the current use which is a vacant Retail premises. The ground floor shop area is to be converted to a 'Café'/Hot Food Takeaway. The kitchen will be preparing food namely burgers, pizza's, chicken and grilled salads. The methods of cooking will be predominantly oven based and appliance warmers to keep the edible produce warm. The ventilation and extract system will not be operated outside opening hours. Gas equipment will be used.

Cooker Hood

An extraction canopy is to extend over the full length of the cooking equipment, overhanging the appliances by a minimum of 250mm. The dimensions of the opening of the cooker hood will be determined when definitive catering equipment layouts are finalised. The canopy will be fitted with gas interlock system, solenoid and air differential switched.

Ductwork

All kitchen extract ductwork is to be 2mm thick welded black steel. Welding is to be continuous throughout with no flanges or bolts. All joints must be continuously welded. All kitchen extract ductwork if within the ceiling void and risers is to be insulated with 25mm aluminium foil faced mineral fibre fleece with a minimum density of 16 Kg/m³ fixed to the ductwork with adhesive and taped with 50mm galvanised wire netting with joints sealed with adhesive tape 'Gypglas' DR16A or similar approved.

Where ductwork passes through floors and roofs, 1-hour fire resistant cladding is to be applied. Where ductwork passes into another fire rated compartment the ductwork is to have the same fire rating as the area it is passing through and must have been tested in accordance with BS 476: Part 24: 1987.

Ducts should not contain any dampers or other obstructions except as required by the Local Authority. 1-hour fire rated access doors are to be fitted at each bend and change in direction in the ductwork. Elbows are to have a radius of 1.5 times the duct width at its centre line. The size and location of the access doors is to allow for internal cleaning of the ductwork in all positions.

Extract ducts are to be sized in accordance with the velocity reduction method.

Filters

Primary and grease baffle filters will be provided at the hood opening and a secondary grease baffle filter at the neck. A bag particle filter and odour control counteractant are to be fitted between the secondary grease filter and the fan. Filters will be cleaned/replaced in accordance with the manufacturer's recommendations.

Flue

The kitchen extract flue indicated on plan has been made flush opting to utilise a more mundane system which will not detract from the street scene and pleasantly fixed flush to the wall to the rear of the property thus reducing vandalism. The ventilation assessment (submitted with this application) indicates a grille size of 450mm x 400mm wide (l x w) discharging out of the building. A rainwater sump is to be fitted. An efflux velocity of a minimum of 9.0m/s should ensure effective dispersion and dilution of odours.

System Performance Specification

The volume of the kitchen is approx. 46.00 metres cube

The velocity of the extracted air leaving the canopy is to be a minimum of 1.58m³/s

The time gases remain in the carbon filtration zone is to be between 0.3 and 0.6 seconds.

Noise

An acoustic silencer is to be positioned between the fan and the ductwork exit through the wall. The extract fan and ductwork fixings are to have anti vibration mountings and flexible couplings.

The rating noise level of the restaurant in relation to the existing background noise level at the nearest noise sensitive property is to comply with BS 4142 and DEFRA guidance on control of odour and noise from commercial kitchens.

Equipment operation will be restricted to 11.00am to 23.00am (All Days).

Passive Ventilation

It is anticipated that passive ventilation will be used to moderate conditions when heating/cooling is not otherwise required by means of opening the rear door and possibly opening the windows.

Maintenance

The maintenance of all serviced parts are to be serviced on an on-going basis to enhance the performance of the system.

- 1 - Baffle Filters will be cleaned twice a week.
- 2 – Pre-filters will be cleaned twice a week.
- 3 – Panel filters replaced every monthly depending upon performance.
- 4 – Carbon bag filters will be replaced every six months dependent upon usage.
- 5 – The whole ducting system will be service and cleaned annually.