



ODOUR MANAGEMENT PLAN AND VENTILATION AND
IMPACT STATEMENT

Description

The proposal is the installation of kitchen extraction ducting system at the rear of the premises to be used as a café/restaurant

Scope of the Work:

All works to be in accordance with the Ventilation Contractors Association (HVCA) guidance DW172-Specification for Kitchen Ventilation System and BS 6173.2001

Gas power source for the kitchen will be provided in accordance with BS 6173, Installation of Gas Fired Catering Appliances.

Fresh Air is to be introduced into the kitchen by means of a Passive Filtered Fresh Air Duct.

Fan Motor Unit:

The Specification:

560 GigaBox Centrifugal Fan.

Manufacturer: Helios

Model: GBW500 /4 / 1

Dimensions: 670 x 670 x 670mm overall

620 x 620mm inside frame

Motor Rating: 1.38 kW

Supply: 240/50/1 phase

Full Load Current: 6.4 amps

Breakout Noise: 45 dB(A) at 4m

Air Performance: 1.94 m³/s @ 200 Pa

1.57 m³/s @ 350 Pa and Speed Controller: TSW 7.5

Silencer Details:

500mm diameter x 500mm long straight through silencer generally reduce fan noise level by 10dB (A)

* There are TWO silencer on either sides of the extractor fan and each silencer reduce noise level by 10dB(A).

Duct access doors:

On every length of duct Access door will be mount to get access to inside of the duct for cleaning.

Canopy:

To be wall mounted unit with face mounted extracts to cater with the following emissions:

- Smoke
- Expanded air from the heat load surrounding the cooking device
- Precipitation of moistures existing in the food into vapours state, primarily consisting of steam, grease and cooking odours.
- Exhaust fumes from combustion appliances such as gas or charcoal.

Canopy is to be manufactured from type 304 DP2 PC2 Stainless Steel with a thickness of 1.2 mm. The canopy is to be of a formed and welded construction complete with:

Heat and steam resistant Fluorescent Lights mounted in white powder coated box with Stypolyte Lens and Stainless Steel Frame

Stainless Steel Baffle Type Grease Filter housed in triangulated filter housing with sloping channels to grease collection cups.

Carbon Filter:

Carbon filters used in this submission is Airclean Discarb. The manufacturer's specification is attached in Appendix.

To that end and in discussion with the supplier, Airclean, The capacities shown are based on a dwell time of 0.1 seconds. For contact times of 0.3 seconds, reduce rated airflow to 1/3rd, pressure drop will also reduce to 1/3rd. Max Temperature 40 Deg C Max Humidity 80% RH

Attention is also drawn to the DEFRA guidance Table 4.7 at Page 57 which advises a residence time of between 0.2 - 0.4 for Kitchens producing large amounts of fried foods or concentrated cooking of burgers with high level discharge stack point.

Ductwork:

Ductwork is to be manufactured and installed to comply with the specification DW172 of HVCA Guide. Extract ductwork to be run internally from canopy through to the rear of the premises in rectangular ductwork, joints to be fully sealed and flanged type.

Maintenance and Cleaning:

Maintenance of the kitchen to be carried out in order to ensure the system remains as efficient as possible and also to ensure that the ventilation plant remains in good condition.

A visual inspection of the ventilation system to be carried out once a week. All metal surfaces to be checked to ensure that there is no accumulation of grease or dirt and that there is no surface damage cooker hoods and grease filters to be cleaned on a daily basis. Mesh filters to be cleaned twice a week.

Cleaning period for extract duct-work to be as follows:

Heavy use 12-16 hours per day 3 monthly

Moderate use 6-12 hours per day 6 monthly

Light use 2-6 hours per day annually

Periodic deep hygiene cleaning to be undertaken by a specialist contractor. All accessible main ductwork runs including fitted equipment to be inspected and cleaned. Fan and equipment to be maintained on a regular basis as recommended by the manufacturer. Ventilation grilles to be easily removable.

Fresh Air Makeup:

Fresh Air Makeup to be provided by means of a run of Galvanised Steel Ductwork and to be of Passive Type of System with throw away Fibreglass Filters to run from rear of premises.

External Extract Ductwork:

Dimensions of 30 x 30 cm. All joints to be sealed and screw fixed using Tec Screw type fasteners and be supported from Cantilever Brackets at not three meters centres.

Ducts are made of galvanize sheet. Kitchen Canopy is made of steel.

The Extract Fan:

The Extract Fan is to be mounted in rear of premises and be fitted with sound attenuators either side with flexible connections and anti-vibration mountings to prevent the transmission of noise and vibration to the building. Extraction unit has been fixed inside the box to reduce noise and disturbance. The fan is to be long cased type with adjustable blades and sized to be as quite as possible.