

# **Ventilation & Extraction Statement**

**10/04/2025**

37 Victoria Road, Ruislip, HA4 9AB

Installation of extractor fan and flue

**Introduction**

Current application is for a change of use from an A1 to Class Use A3.

The kitchen will be preparing hot food (fried chicken, fries) and grilled food primarily along with ice cream, slush and carbonated drinks. The proposed hours of business are 11.00am to 11.00pm on Sunday to Thursday and 11 am to 2 am on Friday and Saturday. The ventilation and extract system will not be operated outside opening hours. All the equipment is electric and there is no gas.

**Proposed Use**

A3

**Kitchen Ventilation /Extraction**

The detailed and installation of the ventilation system will be undertaken by a consultant and contractor specializing in commercial kitchens. The performance and characteristics of the extract system will be in accordance with HVCA standard DW172 and DEFRA Guidance on control of odor and noise for commercial kitchens. This statement sets out the performance objectives of the system, namely that the ventilation and extraction system is to ensure that there is no disturbance, nuisance, loss of amenity to nearby premises as a result of fumes, odor, food particles or noise. This will ensure that fumes/smells are evacuated through the extract system.

**Cooker Hood**

An extraction canopy is to extend over the full length of the cooking equipment, which is around 4 meters in length, overhanging the appliances by a minimum of 200mm. The stainless-steel kitchen canopy will be fitted with interlock system, solenoid, and air differential switches.

**Ductwork**

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 within the ceiling void and risers is to be insulated with 25mm aluminum foil faces mineral fiber fleece with a minimum density of 16Kg/m<sup>3</sup> fixed to the ductwork with adhesive and taped with 50mm galvanized wire netting with joints sealed with adhesive tape Gyplglas DR16A or similar approved.

Where ductwork passes through floors and roof, a one-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 BS476 Part 24 1987.

Ducts should not contain any dampers or other obstructions except as required by the local authority. One-hour fire rated access doors are to be fitted at each bend and change in direction in the ductwork. Elbows are to have the radius of 1.5 times the duct width at its center 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 9.2m/s.

## **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 odor control counteractant is to be fitted between the secondary grease filter and the fan. Filters will be cleaned/ replaced in accordance with the manufacturer's recommendations.

## **Flue**

An extraction to be installed on the rear elevation as shown in the attached drawings.

## **Fan**

Fan type: 2 stage axial flow or similar

Fan code: eq511467 maxfan 500 or similar

Size: 400 mm diameter and extractor box size is 600 x 600 x 1000 mm.

Speed: 1360 rev / min or similar

Elect. Supply :240v 50hz 1phase

Motor rating: 1.94 kw

Motor current: 13.8 amp

Sound level: 75 dB(a) at 3m

Air performance 3.7 m<sup>3</sup>/s at free air

3.2 m<sup>3</sup>/s at 300pa

2.3 m<sup>3</sup>/s at 500 pa

Suitable controller: me1.12

## **Noise**

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 BS4142 and DEFRA guidance on control of odor and noise from commercial kitchens.

Silencer detail

Silencer type: cylindrical 400 mm diameter

Silencer code: 50jms

Performance: 7 to 10 db(a) reduction

Equipment operation will be restricted to 11:00am to 11:00 pm on Sunday to Thursday and 11:00 am to 2:00 am on Friday and Saturdays.