
Specification And Schedule
of Ventilation
Equipment To Be installed

**260-262
London Road
Waterlooville
PO7 7HG**

07/02/2018

The system has been designed in order to provide both an efficient system and a system that complies to current HVCA and Gas Safe Regulations. It has been designed to provide minimal impact and nuisance to the locality. The system has been designed around the following professional guidelines:

DEFRA GUIDE 2005 on the control of odour and noise from commercial kitchen exhaust

Systems HVCA DW 172 Standard for Kitchen Ventilation Systems

HVCA DW 144 Standard for Ductwork

The physical Restraints for Location of the premises

This specification should be read in conjunction with the relevant drawings.

Proposed New System.

A new extract duct, 600mm x 600mm, or equivalent, will be installed to connect the new extract canopy. (see layout for details). The new duct will be concealed within the ceiling void in the kitchen, and by the interior fixtures in the seating area. The extract duct will connect to a purpose provided weather louvre in the front of the unit. All ductwork will be manufactured from 1.0mm galvanized steel sheet. The duct sections are connected via a mezz flange type joint system with gasket seals and clamps provided on all sides over 400mm in length. The ducting will be suspended from 8mm threaded drop rods from the ceiling above with proprietary fixings as required.

Access doors for cleaning to be provided at minimum 3000mm centres and either side of bends and fan units. The main extract duct will be installed with a slight fall back to the canopy.

A new fresh-air duct would be installed to connect from the front louvre to the supply air section of the canopy in the kitchen, and an additional one will be located in the restaurant area providing fresh air to the restaurant area with the option of heating the air if required.

All the above plant is to be installed in the ceiling void above the kitchen area. The suspended ceiling is to be constructed to provide access for future maintenance. For details of above plant see relevant manufacturers literature and for basic layout see relevant drawings.

Equipment List

Electrostatic precipitator = ESP 4500

Odour Control unit = UV-O 1000 (6LAMP)

Extraction Canopy = see below for details.

Extract Fan = SYSTEM-AIR MODEL KDRE65

Supply-air Fan = Axair BD 28/28 ½ HP.

Attenuation = Manufacturers Ancillary.

Duct Heater = Netafan 20 degree rise model

System Operation.

Extract rate = 1.75 m³/sec

Supply air rate = 1.0 m³/sec.

Volume of kitchen = 60 cubic meters

Efflux velocity = 4m/sec max.

Extract Canopy

The canopy would measure 5000mm long x 1200mm x 500mm deep. The canopy would be manufactured entirely of grade 304, 1.2mm, grain finish stainless steel. The perimeter would contain a 50mm condense channel which would be fully welded and polished. The will contain a full length grease filter retaining frame which will contain 10 no 500mm x 500mm stainless steel baffle type grease filters.

The canopy would contain a fresh-air section to the front face to provide fresh air into the kitchen. The canopy would contain 2 no 1200 x 400mm louvre faced diffusers.

Canopy Weight

The weight of the canopy is 125 kg (approx) The canopy will be suspended from the concrete structure above by the fitting of 8 no m8 drop rods to uni-rack fixed to the structural slab above, onto the pre-welded suspension hangers on the canopy.

Fresh air input system specifications

Air volume. 0.5m³/second

Fan unit. BD10/8 M6 0.19 kW.

Heater Battery. Neatafan. Model no 20 degree temp rise.

Ductwork. 350mm diameter spiral wound.see drawing for detail.

Diffusers. 4 no 500mm x 125mm

Each handling 0.125m³/sec.(v=2m/sec)

Attenuator.Roof units, 315mm diameter 600mm long. See chart for insertion losses

In compliance with DEFRA annex B documentation please see information below

Premises Information.

Number of daily meals Approx 150

Cooking Method light frying,grilling and baking

Menu Typically English breakfasts.

Hours of operation 09.00 – 15.00. 18.00 – 21.00.

Pre-filters

Pre filters in canopy 10 no stainless steel baffle type 500mm x 400mm, no other pre-filters are necessary

Electrostatic precipitators

- purified air
- ESP 4500;
- dimensions of the ESP 1250/630/660; and flow rate rating 7500m³/h.

Manufacturer's recommendation on the frequency and type of maintenance of the ESP having regard to the conditions that it will be used under. See maintenance section 11

Carbon Filters (none)**Odour counteractant or neutralising system)**

The details and type of counteractant or neutralising system should be identified. A copy of the manufacturer's product data sheet should be supplied that clearly shows:

- manufacturer's name; purified air
- name of delivery system and product code; UV-O 1000 (6LAMP)
- counteractant or neutralising chemical to be used; NA
- COSHH data sheets for chemical to be used; NA

and anticipated counteractant or neutralising delivery rate. See literature

Cooker hood

The following information on the characteristics of the cooker hood should be supplied that clearly shows the:

- length that the cooker hood overhangs the appliances; 300mm on front, and its fitted wall to wall so enclosed at both ends
- face velocity at the cooker hood, expressed in metres per second; 3.4 meters per second and
- dimensions of the opening of the cooker hood;.5meters x 1.2 meters