Ventilation & Extraction Statement
59 BURDETT ROAD LONDON E3 4TN
Application for:
CHANGE OF USE FROM RETAIL E(a) TO RESTAURANT E(b).

Kitchen Ventilation/Extraction

The detailed design and installation of the ventilation system be undertaken by a consultant and contractor specialising in commercial kitchens. The final cooking line will be Longar Industries Ltd. 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 particles 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 restaurant 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 than being vented through windows and doors.

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 350*110cm. The dimensions of the opening of the cooker hood will be 30/50 cm. The canopy will be fitted with gas interlock System, solenoid and air differential switches.

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 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 duct- work 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 roof an 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 rated access doors are to be fitted at each bend and change in direction in the ductwork. Elbows are to have a radius of except as required by the Local Authority. One-hour fire 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 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 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 has been located as far as possible from neighbouring buildings. The final discharge is to be vertically upwards with no obstructing cowl. A rainwater sump is to be fitted. The flue is to be 1 meter above opening windows within 18 metres of the flue. An efflux velocity of a minimum of 90 m/s should ensure effective dispersion and dilution of odours.

System Performance Specification
The velocity of the extracted air leaving the system is to be a minimum of 9.2 m/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 roof slab. 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.