SYSTEM SPECIFICATION SHEET

Canopy

Canopy dimension are 2300mm length, x 1200mm wide x 500mm back x 300mm front wall mounted canopy with the filter banks running along the back side of the unit, all corners are fully welded, with drain taps fitted to the back drain channel for cleaning purposes. Finish Type Fine grain satin stainless steel finish Filters Stainless steel baffle filters for easy cleaning, filter size 400(W)mm x 500(H)mm x 50mm. Canopy face velocity 127ft/min

Extraction Fan

The fan specified in the extraction system is S&P contra rotating cased axial fan, TCBB/4400, rpm 1420, sound pressure level 60 dBA, air volume 5190 (m3/h), speed control REB 5. The fan will be fitted with anti-vibration mountings and DEC flexible connections between the fan and silencers; this will stop any reverberation noise travelling through the ceiling and walls.

Odour control system

Two stage odour filter unit. The system will be fitted with two stage carbon filter units to remove any oil or grease, and smells that will come from the kitchen. A heavy duty actuated carbon cell will not be used in this system. The installation of two washed mesh filters 495mm x 495mm x 50mm to remove any grease and any other particles that have passed through the canopy filters, this with prolong the life of the fan. After the air has passes through the canopy filters there will be one x OC2 units that inject ozone into the ductwork to neutralize the smells. Calculation for carbon filter dwell time is (Area x depth divided by volume.) 1000 x 500 x 500x deep cell =2.5mM2 2.5 xm2 x 0.8 divided by 1.65m3/sec =0.2 seconds dwell time. The carbon filter system is to be mounted within the application site, for maintenance and servicing so that it doesn’t encroach on any other surrounding property or neighbours. There will be a strict maintenance policy on this system.

Silencers

Two silencers will be fitted into the system, on both sides of the fan sizes there will be 500mm long, x 400mm (inside measurement) wall thickness of 75mm. This will lower the sound level to 33 to 35dBA @mid-range frequencies at the termination point Silencer Ref: Acoustical CPO3-C*P-040-2D

Make Up Air Supply

The fan specified in the makeup air system is an S&P CBM fan. CBM-10/10 373W 4PC VR, IP rated 44 class F airflow 4770 m3/h dba 53. The air make up systems are made up of a unit that contains the fan G4 panel filter to remove fine particles and dust from outside with open end manifold. The air supply will be brought into the kitchen through the a 450mm x 450mm weather louver grille and 400 MU flex ducting to the fan unit, and then will be disbursed through the front of the canopy using single deflection grilles size 200mm x 200mm. This system will give 85% volume of the extraction system, 85% volume of the extracted air is required to be replaced by mechanical air supply fan and controller discharging through surface mounted grilles or sufficient free area space i.e.: windows or doors open with fly screens to give air replacement.

Duct work

The ducting systems will exit from the back of the canopy, in 400mm SPT ducting. Ducting Colour will be galvanised steel and a galvanised accelerator cowl will be used. Discharge velocity on each cowl14-15m3/s. The proposed systems will comply with DW175 regulations and specifications with regards to ducting sizes, heights and fan duties etc. The Commissioning sheet will be issued after the work has been completed showing air flow rate and inventory of the system fitted.

Gas Interlocking

The Ventilation/Gas interlock system for the kitchen area shall be manufactured and supplied by reputable specialist firm, Gas Safety Systems type Merlin CT1250. The panel dimensions are 254mm high x 178mm wide x 62 mm deep. The box shall be rated to IP65 it shall be an ABS enclosure and be CE Approved. The fascia of the panel should be key operated (on/off) and a shrouded emergency shut off button located in the top right hand corner should be fitted (to meet BS6173.2001). The Ventilation/Gas interlock panel shall have a total of 7 L.E.D’S on the fascia, these should be: Power, Gas On, EM Stop, Supply Fan, Extract Fan, Fan Fault and Service). 1 x Merlin CT1250 Panel 1 x Gas Solenoid Valve (Size to be 1 1/2) 2 x Remote Gas Shut-Off Button (where required) to be fitted to the fire exists.