

Information for Environmental Officer

30th June 2011

4.50 Metre fine grain satin finish stainless steel wall canopy, complete with stainless steel baffle filters and a fully welded drain channel and tap for easy cleaning.

Stainless steel wall cladding, behind the canopy only.

Mounting the canopy on the back wall, exiting from the top and turning to the rear of the premises to a twin activated twin carbon filter, then to a 500mm twin impellered axial fan complete with speed controller and a 450mm long attenuator, all mounted internally off rubber anti-vibration mountings to stop vibration above, ducting exits through rear wall and terminates with a cut off cowl complete with bird mesh.

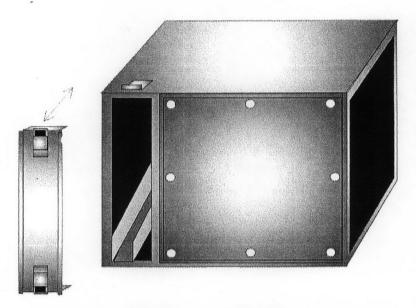
The fan specified is a Vent Axia 500mm contra rotating axial fan, 1420rpm, Noise level 59dba at 2 metres. With a 450mm long podded silencer after the fan, noise would reduce to 41dba at 2 metres, the ducting supports would be mounted on residual rubber anti vibration mountings to stop any reverberation noise travelling through the wall.

Transformer speed controller that stops any harmonics.

Fan duty 2.00m3/sec @ 220pa. Static pressure.

Canopy face velocity 100ft/min (0.51m/s)





QUICK RELEASE CLIPS ON PRE-FILTER SECTION

Jasun filtration, supply our pre filters and carbon cassettes, catercarb granular carbon bonded in a cassette in a V formation for more surface area coverage.

Air supply system is a Soler & Palau 450mm axial fan complete with silencer and controller to replace 80% of extracted air, fan complete with speed controller, noise with silencer fitted 42dba at 2 metres, discharging into the front face of the canopy through discharge louvers, mounted at high level.

All our systems comply with DW172 regulations and specifications regards to ducting sizes, heights and fan duties etc.

General guidelines to cleaning and maintaining an extraction system

The fan and ducting have been situated to maximise the full extraction potential. It is important that the following procedures are carried out as stipulated,

The canopy must be externally cleaned on a weekly basis. All grease filters must be cleaned at Least three times a week using hot soapy water, to avoid grease carry over.



Discharge velocity through cowl 14.35 m/s

Fan and associated equipment, mounted internally to reduce noise generation and maintaining good aesthetics outside.

Easier for maintaining pre filters are clean or replaced and general maintenance.

Gas interlock system fitted, which will shut gas off in the event of fan failure or stop button pressed, cooking cannot commence until interlock as allowed gas to flow.

Carbon filters are fitted with a pleated pre-filter to stop any carry over grease, before actuated carbon filters. In the canopy you have baffle type grease filters, which have a drain gully, which allows grease to run into bottom channel to a drain tap, which can be drained and cleaned weekly.

The actuated twin heavy duty carbon filter complete with v pleat pre-filter

Dwell time 0.50 seconds Area x deep divided by volume

 $1200 \times 600 \times 800$ mm deep carbon cell = 0.72 M2.

 0.72×0.80 divided by 2.00 m3/sec = 0.29 seconds dwell time.

Heavy duty carbons will achieve a volume of 1.60m3/sec x 2 = 3.20m3/sec

3.20 divided by 2.00 = 1.60 factor, 0.29 dwell time multiplied 1.60 = 0.46secs and with the pre filters extra 0.06secs which is a total of 0.50secs dwell time each.