Extraction system

2500x1200 Metre fine grain stainless steel satin finish canopy complete with 500mm square stainless steel baffle filters and a fully welded drain channel and tap for easy cleaning**.**

No plenum-mounted lights

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Hanging the canopy from roof and back wall.

point of extraction off the back of the canopy to a carbon filter with pre filters unit, transposing to a 500mm fan and a attenuator silencer
and to 500mm diameter galvanised spiral ducting
up the wall and rising to terminate one metre above the eaves with a high velocity cowl complete with bird mesh

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The extraction fan specified is a flaktwoods 500mm axial fan [50jm]
axial fan, 1420rpm, Noise level 51dba at 3 metres.

With silencer after the fan,Noise would reduce to 30dba at 3 metres,

The ducting supports would be mounted on
rubber anti vibration mountings to stop any verberation noise travelling through

Transformer speed controller

Fan duty 1.70m3/sec @ 350pa. Static pressure.

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

Discharge velocity through high velocity cowl 12.25 m/s

All our ductwork comply with DW172 regulations and specifications

Carbon filters will neutralise 90% of the odour before discharging to atmosphere.

The Actuated heavy duty carbon filter complete
Dwell time 0.21 seconds Area x deep divided by volume
600 x 600 x 900mm carbon cell = 0.36 M2.
0.36 x 0.80 divided by 1.70 m3/sec = 0.17 seconds dwell time.
This type of heavy duty granulated carbon will achieve duty 2.10 ms/sec
2.10 divided by 1.70 = 1.23 0.17 x 1.23 = 0.21 seconds dwell time

Summary Cleaning Information

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.
The canopy and full extraction system must be professionally deep cleaned no later than
twelve months after installation and certified. Failure to adhere to these guidelines will
prevent the system working to its full potential, and odours may arise due to grease residue
inside the ducting giving a carry over

Canopy
Wash down weekly with hot soapy water ensure all fat channels are clear and clean.

Grease Filters
Clean at least three times a week using hot soapy water, water must be hot enough that
rubber gloves are worn.
Ensure oil and fat outlets are clear and clean. Replace filters with the drainage slots at the
bottom facing down.

Pre filtration / Carbon Filters if Fitted
Change- manufactures Recommendation each twelve months – eighteen months depending
on hours used and type of deposits left on the filters.

**Manufactured from a number of carbon biscuits held in a vee formation within a corrosion-proof metal
casing, these are sealed into the frames of our filters using polymer, which eliminates the possibility of
any air bypass around the carbon.**
Type 8 carbon filter features:
- **High quality carbon – all grades available**
- **Robust modular construction**
- **High carbon content**
- **Special sizes available upon request**
- **Low pressure losses**

pre-filtration

**Longar's galvanised carbon filtration housings encompass the activated carbon filters, along with prefiltration.
The activated carbon filters serve the purpose of filtering odour and gas from all kinds of applications, from commercial kitchens to gas turbines, whilst the pre-filtration will filter grease, dust,
oil mists and remove smoke from the air.**