



Kitchen Ventilation System

System Specification

Customer: Mr. W. Zhang

Project: Noodles 1A New Oxford Street

Project Number: K12215A

Prepared By: M.Desmond

Date: 02/12/2021

Contact Details Tel: 029 2079 9700

Fan Schedule										
REF	Fan Type	Air Volume m3/s	External Resistance (Pa)	Fan Model	Electrical Supply	Motor Rating (Kw)	Max Speed	Noise level @3m sphere	Weight	Installation Arrangement
EF1	Centrifugal	3.72m3/s	450pa	MUB/T 100 630D4-K2-L	3-Phase	5.1kw	1439	57dba	183kg	In-Line, ducted
SF1	Axial	3.162m3/s	220pa	SLC 560/4/3B-AC	3-Phase	1.6kw	1460	60dba	44kg	In-Line, ducted



Odour Abatement

Kitchen Odour Abatement Proposal Extract System 1

Air Volume:	3.72m ³ /s
Cooking Application:	Chinese food
Meals served per day	
Opening Hours	

Outlet Type	Dispersion of Receptors	Proximity of Receptors	Size of kitchen	Cooking type	Total Score
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Pub	10	5	3	10	28
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Impact Risk	Odour Control Requirement	Significance Score
Low to Medium	Low level odour control	Less than 20
High	High Level Odour Control	20 to 35
Very High	Very High Level Odour Control	More than 35

First Stage Filtration

Type 11 Pleated Panel Filter 595x595x45mm, pressure drop (pd) 55pa
 Efficiency: G4
 Qty: 4
 Manufacturer: Purified Air

Second Stage Filtration

Electrostatic Precipitator 4500E 1350 x 630 x 640
 Efficiency: 98%
 Qty: 3
 Manufacturer: Purified Air

Third Stage Filtration

Ultra violet UV-0 1000
 Efficiency: 98%
 Qty: 3
 Manufacturer: Purified Air

Fourth Stage Filtration

Type 8 Carbon Cube 597x597x597mm, pd 125pa
 Contact Time: 0.3 seconds
 Qty: 4
 Manufacturer: Longar Industries Ltd

Fifth Stage Filtration

O.N. 10 Deodoriser
 Efficiency: NA
 Qty: 1
 Manufacturer: Purified Air



Plant Loadings

Kitchen Extract				Kitchen Supply			
<i>Equipment</i>	Qty	Weight(kg)	Total	<i>Equipment</i>	Qty	Weight (kg)	Total
<i>Carbon Housing</i>	1	80	80	<i>Silencers</i>	2	45	90
<i>Carbon cells</i>	4	70	280	<i>Duct</i>	1	40	40
<i>Extract fan</i>	1	184	184	<i>Frame</i>	1	35	35
<i>Silencer</i>	1	60	60	<i>Fan</i>	1	44	44
<i>Duct</i>	1	130	130				
<i>ESP</i>	3	140	420				
<i>UV-0</i>	3	80	240				
		Total	1394			Total	209



Kitchen Extraction Maintenance Programme

Odour Filtration

Filter Type	S/steel Grease filter	Glass Panel filter	ESP	UV-0 1000	Carbon Filter	O.N.10
Location	Canopy	Plant deck	Plant deck	Plant deck	Plant deck	Plant deck
Replace/Clean	Clean Dishwasher	Replace	Clean	Clean	Replace	top up
Duration	Daily	8 weeks	see note	12 months	4/6 Months	monthly
Size	495x495x45mm	597x597x45	1350 x 630 x 640	1285x660x660	597hx597wx597d	500 x 400 x 200

UV-0 Maintenance

Action	Every week/2months	Every 3 Months	Every 12 months
Clean UV Lamps		x	
Replace UV Lamps			X
Clean the inside of the product and remove dust/grease		x	

ESP Maintenance

Action	Every 4 weeks	Every 6 Months	Every 12 months
Clean the outside of the product with mild detergent		X	
Check the door sealing material			X
Clean the inside of the product and remove dust/grease from the filter compartment	X		
Clean the prefilter, ioniser, collector and the final filter and check for damages	X		