

Application for Planning Permission. Town and Country Planning Act 1990

Publication of applications on planning authority websites.

Please note that the information provided on this application form and in supporting documents may be published on the Authority's website. If you require any further clarification, please contact the Authority's planning department.

Number	14
Number	14
Suffix	
Property name	
Address line 1	London Road
Address line 2	
Address line 3	
Town/city	Gloucester
Postcode	GL1 3NE
Description of site le	ocation must be completed if postcode is not known:
Easting (x)	383609
Northing (y)	218760
Description	

2. Applicant Details				
Title	Mr			
First name	Khalil			
Surname	Rehman			
Company name	Caprinos Pizza			
Address line 1	14, London Road			
Address line 2				
Address line 3				
Town/city	Gloucester			
Country				

2. Applicant Details

Postcode

Are you an agent act	ing on behalf of the applicant?
Primary number	
Secondary number	
Fax number	
Email address	

3. Agent Details		
Title	Mr	
First name	Yassar	
Surname	Mahmood	
Company name	Designcom Architectural Services	
Address line 1	Unit 78 Norfolk House	
Address line 2	Saxon Gate West	
Address line 3		
Town/city	Milton Keynes	
Country	Buckinghamshire	
Postcode	MK9 2DL	
Primary number		
Secondary number		
Fax number		
Email		

4. Site Area What is the measurement of the site area? (numeric characters only). Unit Sq. metres

5. Description of the Proposal

Please describe details of the proposed development or works including any change of use.

If you are applying for Technical Details Consent on a site that has been granted Permission In Principle, please include the relevant details in the description below.

Change of use from A1 (Class E) to A5 Class use for a Pizza takeaway delivery

Has the work or change of use already started?

🔍 Yes 🛛 💌 No

🖲 Yes 🛛 🔾 No

6. Existing Use				
Please describe the current use of the site				
Class E (A1)				
Is the site currently vacant?		Yes	◯ No	
If Yes, please describe the last use of the site				
A1 Furniture Shop				
When did this use end 01/04/2021 (if known)? DD/MM/YYYY				
Does the proposal involve any of the following? If Yes, you v	vill need to submit an appropr	iate contamination assessmen	t with your application.	
Land which is known to be contaminated		Q Yes	No	
Land where contamination is suspected for all or part of the site		Q Yes	No	
A proposed use that would be particularly vulnerable to the prese	ence of contamination	Q Yes	No	
7. Materials				
Does the proposed development require any materials to be use	d externally?	◯ Yes	No	
8. Pedestrian and Vehicle Access, Roads and Rig	ghts of Way			
Is a new or altered vehicular access proposed to or from the public highway?			No	
Is a new or altered pedestrian access proposed to or from the public highway?			No	
Are there any new public roads to be provided within the site?		Q Yes	No	
Are there any new public rights of way to be provided within or a	djacent to the site?	Q Yes	No	
Do the proposals require any diversions/extinguishments and/or creation of rights of way?			No	
9. Vehicle Parking				
Does the site have any existing vehicle/cycle parking spaces or v spaces?	will the proposed development a	dd/remove any parking	O No	
Please provide information on the existing and proposed number of on-site parking spaces				
Type of vehicle	Existing number of spaces	Total proposed (including spaces retained)	Difference in spaces	
Cars	20	20	0	
L]		
10. Trees and Hedges				

Are there trees or hedges on the proposed development site?	Q Yes	No
And/or: Are there trees or hedges on land adjacent to the proposed development site that could influence the development or might be important as part of the local landscape character?	Q Yes	No

If Yes to either or both of the above, you may need to provide a full tree survey, at the discretion of your local planning authority. If a tree survey is required, this and the accompanying plan should be submitted alongside your application. Your local planning authority should make clear on its website what the survey should contain, in accordance with the current 'BS5837: Trees in relation to design, demolition and construction - Recommendations'.

11. Assessment of Flood Risk		
Is the site within an area at risk of flooding? (Check the location on the Government's Flood map for planning. You should also refer to national standing advice and your local planning authority requirements for information as necessary.)	Q Yes	No
If Yes, you will need to submit a Flood Risk Assessment to consider the risk to the proposed site.		
Is your proposal within 20 metres of a watercourse (e.g. river, stream or beck)?	Q Yes	
Will the proposal increase the flood risk elsewhere?	Q Yes	• No
How will surface water be disposed of?		
Sustainable drainage system		
Existing water course		
Soakaway		
Main sewer		
Pond/lake		

12. Biodiversity and Geological Conservation

Is there a reasonable likelihood of the following being affected adversely or conserved and enhanced within the application site, or on land adjacent to or near the application site?

To assist in answering this question correctly, please refer to the help text which provides guidance on determining if any important biodiversity or geological conservation features may be present or nearby; and whether they are likely to be affected by the proposals.

a) Protected and priority species:

Yes, on the development site

Q Yes, on land adjacent to or near the proposed development

🖲 No

b) Designated sites, important habitats or other biodiversity features:

Q Yes, on the development site

Q Yes, on land adjacent to or near the proposed development

🖲 No

c) Features of geological conservation importance:

Yes, on the development site

🖲 No

13. Foul Sewage

Please state how foul sewage is to be disposed of:

Mains Sewer

Septic Tank

Package Treatment plant

Cess Pit

Other

Unknown

Are you proposing to connect to the existing drainage system?

14. Waste Storage and Collection

Do the plans incorporate areas to store and aid the collection of waste?

If Yes, please provide details:

🖲 Yes 🛛 🔍 No

Yes No Unknown

14. Waste Storage and Collection			
Bins collected by private contractor			
Have arrangements been made for the separate storage and collection of recyclable waste?	Yes	◯ No	
If Yes, please provide details:			
Bins provided by Private contractor			
15. Trade Effluent			
Does the proposal involve the need to dispose of trade effluents or trade waste?	Q Yes	No	
16. Residential/Dwelling Units			
Please note: This question has been updated to include the latest information requirements specified by government. Applications created before 23 May 2020 will not have been updated, please read the 'Help' to see details of how to workaround this issue.			
Does your proposal include the gain, loss or change of use of residential units?	Q Yes	No	
17. All Types of Development: Non-Residential Floorspace			
Does your proposal involve the loss, gain or change of use of non-residential floorspace? Note that 'non-residential' in this context covers all uses except Use Class C3 Dwellinghouses.	Yes	◯ No	
Please add details of the Use Classes and floorspace.			

Following changes to Use Classes on 1 September 2020: The list includes the now revoked Use Classes A1-5, B1, and D1-2 that should not be used in most cases. Also, the list does not include the newly introduced Use Classes E and F1-2. To provide details in relation to these or any 'Sui Generis' use, select 'Other' and specify the use where prompted. Multiple 'Other' options can be added to cover each individual use. View further information on Use Classes.

Gross internal

metres)

floorspace to be lost

by change of use or

demolition (square

230

230

Existing gross

internal floorspace

230

230

(square metres)

Planning Portal Reference: PP-09826902

Loss or gain of rooms

Use Class

Total

metres)

A1 - Shops Total floorspace

A1 - Shops Net Tradable Area

Existing gross internal floorspace (square

Gross internal floorspace to be lost by change of use or demolition (square metres)

Total gross new internal floorspace proposed (including changes of use) (square metres)

Net additional gross internal floorspace following development (square metres)

For hotels, residential institutions and hostels please additionally indicate the loss or gain of rooms:

0

230.0

230.0

230.0

18. Employment

Are there any existing employees on the site or will the proposed development increase or decrease the number of employees?

🔍 Yes 🛛 💿 No

Total gross new

changes of use)

(square metres)

internal floorspace

proposed (including

230

230

Net additional gross internal floorspace

development (square

0

0

following

metres)

19. Hours of Opening

Are Hours of Opening relevant to this proposal?

🖲 Yes 🛛 🔾 No

Please add details of the of the Use Classes and hours of opening for each non-residential use proposed.

Following changes to Use Classes on 1 September 2020: The list includes the now revoked Use Classes A1-5, B1, and D1-2 that should not be used in most cases. Also, the list does not include the newly introduced Use Classes E and F1-2. To provide details in relation to these or any 'Sui Generis' use, select 'Other' and specify the use where prompted. Multiple 'Other' options can be added to cover each individual use. View further information on Use Classes.

If you do not know the hours of opening, select the Use Class and tick 'Unknown' in the popup box.

Use	Monday to Friday	Saturday	Sunday and Bank Holidays	Unknown
A5 - Hot food takeaways	Start Time: 11:00 End Time: 23:00	Start Time: 11:00 End Time: 23:00	Start Time: 11:00 End Time: 23:00	

20. Industrial or Commercial Processes and Machinery		
Does this proposal involve the carrying out of industrial or commercial activities and processes?	Q Yes	No
Is the proposal for a waste management development?	Q Yes	No
If this is a landfill application you will need to provide further information before your application can be determin should make it clear what information it requires on its website	ed. You	r waste planning authority
21. Hazardous Substances		
Does the proposal involve the use or storage of any hazardous substances?	Q Yes	
22. Site Visit		
Can the site be seen from a public road, public footpath, bridleway or other public land?	e Yes	O No
If the planning authority needs to make an appointment to carry out a site visit, whom should they contact?		
 The agent The applicant 		
Other person		
23. Pre-application Advice		
Has assistance or prior advice been sought from the local authority about this application?	Q Yes	No
24. Authority Employee/Member		
With respect to the Authority, is the applicant and/or agent one of the following: (a) a member of staff (b) an elected member (c) related to a member of staff		
(d) related to an elected member		
It is an important principle of decision-making that the process is open and transparent.	Q Yes	No
For the purposes of this question, "related to" means related, by birth or otherwise, closely enough that a fair-minded and informed observer, having considered the facts, would conclude that there was bias on the part of the decision-maker in the Local Planning Authority.		
Do any of the above statements apply?		

25. Ownership Certificates and Agricultural Land Declaration

CERTIFICATE OF OWNERSHIP - CERTIFICATE A - Town and Country Planning (Development Management Procedure) (England) Order 2015 Certificate under Article 14

I certify/The applicant certifies that on the day 21 days before the date of this application nobody except myself/the applicant was the owner* of any

25. Ownership Certificates and Agricultural Land Declaration

part of the land or building to which the application relates, and that none of the land to which the application relates is, or is part of, an agricultural holding**

* 'owner' is a person with a freehold interest or leasehold interest with at least 7 years left to run. ** 'agricultural holding' has the meaning given by reference to the definition of 'agricultural tenant' in section 65(8) of the Act.

NOTE: You should sign Certificate B, C or D, as appropriate, if you are the sole owner of the land or building to which the application relates but the land is, or is part of, an agricultural holding.

Person role The applicant The agent 	
Title	Mr
First name	Khalil
Surname	Rehman
Declaration date (DD/MM/YYYY)	10/05/2021

Declaration made

26. Declaration

I/we hereby apply for planning permission/consent as described in this form and the accompanying plans/drawings and additional information. I/we confirm that, to the best of my/our knowledge, any facts stated are true and accurate and any opinions given are the genuine opinions of the person(s) giving them.



Type 90 Panel Filter



The Type 90 panel filter is a disposable product offering a basic level of filtration, or pre-filtration in HEVAC applications.

Construction

This product is constructed by bonding a pad of smartglass fibre into a water repellent AquaKote® card frame

Filter Efficiency	G3	
Filter Thickness	Rated Airflow	Initial Pressure Drop
20mm	1.5m/sec	18Pa
45mm	2.0m/sec	50Pa
Final Recommend	led Pressure Drop	150Pa

Features

The Frame is made from AquaKote card which has

- Superior tear resistance when wet
- Great dry tear resistance and

Manufacturered from a renewable source.

The Glass Fibre media

- Is made from a recycled products
- Has a graduated density to provide great
- depth loading of dirt
- Is available any size
- Is Takified to provide improved efficiency
- Is very inexpensive



FMS 81914 BS EN ISO 14001:2004 FM 2925

BS EN ISO 9001:2000

United Kingdom

No.	Nominal Size Inches	Height (mm)	Width (mm)	Depth (mm)	Rated Airflow m³/hr
TA1-1010	10x10x1	241	241	20	318
TA1-1020	10x20x1	241	495	20	654
TA1-1212	12x12x1	292	292	20	467
TA1-1224	12x24x1	292	594	20	951
TA1-1515	15x15x1	368	368	20	742
TA1-1520	15x20x1	368	495	20	999
TA1-1616	16x16x1	394	394	20	851
TA1-1620	16x20x1	394	495	20	1070
TA1-1625	16x25x1	394	622	20	1344
TA1-1818	18x18x1	445	445	20	1086
TA1-1831	18x31x1	445	775	20	1892
TA1-2020	20x20x1	495	495	20	1344
TA1-2024	20x24x1	495	594	20	1613
TA1-2025	20x25x1	495	622	20	1689
TA1-2424	24x24x1	594	594	20	1935

No.	Nominal Size Inches	Height (mm)	Width (mm)	Depth (mm)	Rated Airflow m³/hr
TA2-1010	10x10x2	241	241	45	522
TA2-1020	10x20x2	241	495	45	1073
TA2-1212	12x12x2	292	292	45	767
TA2-1224	12x24x2	292	594	45	1561
TA2-1515	15x15x2	368	368	45	1218
TA2-1520	15x20x2	368	495	45	1639
TA2-1619	16x19x2	394	470	45	1666
TA2-1620	16x20x2	394	495	45	1755
TA2-1624	16x24x2	394	594	45	2106
TA2-1625	16x25x2	394	622	45	2205
TA2-1818	18x18x2	445	445	45	1782
TA2-1820	18x20x2	445	495	45	1982
TA2-1824	18x24x2	445	594	45	2378
TA2-2020	20x20x2	495	495	45	2205
TA2-2024	20x24x2	495	594	45	2646
TA2-2025	20x25x2	495	622	45	2771
TA2-2424	24x24x2	594	594	45	3175





V Line Pleated Panel Filter Economy Standard





General Description

The V Line pleated Panel filter is a standard capacity disposable product offering a better than basic level of filtration, or pre-filtration in HEVAC applications. This product is made using patented Kimberly Clark media which delivers a constant level of filtration over its life.

Construction

This product is constructed by bonding a pleat pack of Intrepid V Line media into a water repellent AquaKote card frame

Features

The Frame is made from AquaKote card which has

- Superior tear resistance when wet
- Great dry tear resistance and
- Manufactured from a renewable source.

Kimberley Clark Patented Intrepid Media

- Has a Graduated Density for even dirt loading, resulting in greater dust holding
- Hydrophobic so will not load with moisture in the • air
- Has a constant efficiency due to its extra • electrostatic charge
- Superior Efficiency V's Particle size (see table)
- Has a low pressure drop
- Is made form continuous fibres so will not shed

Filter Efficiency to BS EN 7	79	G4
Rating to ASHRAE 52.2 Tes	t Standard	Merv 8
Filter Thickness	Rated Airflow	Initial Pressure Drop
20mm	1.5m/sec	60Pa
45mm	2.0m/sec	62Pa
95mm	2.5m/sec	80Pa
Final Recommended Pro	250Pa	



Test Comparing Filtration efficiency V's different sized particles. Intrepid Media V's Cotton **Polverster Filters**

	Initial Fractio	nal Efficiency(%)								
Particle Size Rang(mm)	V Line Intrepid	The "best" Cotton Poly Alternative								
0.3-0.4	7	2								
0.4-0.55	15	6								
0.55-0.7	28	11								
0.7-1.0	41	19								
1.0-1.3	52	24								
1.3-1.6	58	28								
1.6-2.2	63	32								
2.2-3.0	67	36								
3.0-4.0	70	37								
4.0-5.5	71	38								
5.5-7.0	72	38								
7.0-10.0	73	39								





Airflow

Designed in Britain, Made in Britain

V Line Panel Filter (VL) STANDARD SIZES



No.	Nominal Size Inches	Height (mm)	Width (mm)	Depth (mm)	Rated Airflow m³/hr
VL4-1010	10x10x4	241	241	95	544
VL4-1020	10x20x4	241	495	95	1117
VL4-1212	12x12x4	292	292	95	798
VL4-1224	12x24x4	292	594	95	1623
VL4-1515	15x15x4	368	368	95	1268
VL4-1520	15x20x4	368	495	95	1705
VL4-1616	16x16x4	394	394	95	1453
VL4-1620	16x20x4	394	495	95	1825
VL4-1625	16x25x4	394	622	95	2294
VL4-1818	18x18x4	445	445	95	1854
VL4-1831	18x31x4	445	775	95	3228
VL4-2020	20x20x4	495	495	95	2293
VL4-2024	20x24x4	495	594	95	2752
VL4-2025	20x25x4	495	622	95	2882
VL4-2424	24x24x4	594	594	95	3303

No.	Nominal Size Inches	Height (mm)	Width (mm)	Depth (mm)	Rated Airflow m³/hr
VL2-1010 10x10x2		241	241	45	418
VL2-1020	10x20x2	241	495	45	859
VL2-1212	12x12x2	292	292	45	614
VL2-1224	12x24x2	292	594	45	1249
VL2-1515	15x15x2	368	368	45	975
VL2-1520	15x20x2	368	495	45	1312
VL2-1619	16x19x2	394	470	45	1333
VL2-1620 16x20x2		394	495	45	1404
VL2-1624	16x24x2	394	594	45	1685
VL2-1625	16x25x2	394	622	45	1764
VL2-1818	18x18x2	445	445	45	1426
VL2-1820	18x20x2	445	495	45	1586
VL2-1824	18x24x2	445	594	45	1903
VL2-2020	20x20x2	495	495	45	1764
VL2-2024	20x24x2	495	594	45	2117
VL2-2025	20x25x2	495	622	45	2217
VL2-2424	24x24x2	594	594	45	2540

No.	Nominal Size Inches	Height (mm)	Width (mm)	Depth (mm)	Rated Airflow m³/hr
VL1-1010	10x10x1	241	241	20	314
VL1-1020	10x20x1	241	495	20	644
VL1-1212	12x12x1	292	292	20	460
VL1-1224	12x24x1	292	594	20	937
VL1-1515	15x15x1	368	368	20	731
VL1-1520	15x20x1	368	495	20	984
VL1-1619	16x19x1	394	470	20	1000
VL1-1620	16x20x1	394	495	20	1053
VL1-1624	16x24x1	394 594 20		1264	
VL1-1625	16x25x1	394	622	20	1323
VL1-1818	18x18x1	445	445	20	1069
VL1-1820	18x20x1	445	495	20	1189
VL1-1824	18x24x1	445	594	20	1427
VL1-2020	20x20x1	495	495	20	1323
VL1-2024	20x24x1	495	594	20	1588
VL1-2025	20x25x1	495	622	20	1663
VL1-2424	24x24x1	594	594	20	1905

ENVIROCARE

Pressure Drop vs/ Face Velocity V Line VL4 Panel Filter 95mm Thick



Pressure Drop vs/ Face Velocity V Line VL2 Panel Filter 45mm Thick



Pressure Drop vs/ Face Velocity Vline VL1 Panel Filter 20mm Thick



Riverside House, Parrett Way Bridgwater TA6 5LB

Permanent Suspension Mobiles

GENERAL DESCRIPTION

These filters are manufactured for ease of installation and incorporation into ducted air systems. They can be used on both supply for purifying incoming air, and can be used on the extract to remove toxic gasses and odours generated within a process.

Construction

The modules are manufactured by mounting a series of panel filters within a sealed case. The airflow is optimized by presenting the filtering surfaces in a "V" formation.

Each panel is sealed into the filter case so as to ensure no air can bypass the bonded granules.

The panels are manufactured using long established bonding techniques which hold the granules in a in a rigid biscuit. The biscuit is encapsualted in a carbon impreganted cloth which prevents any leakage of granules or powder.

The unique bonding method used by Purified Air ensures that the panels will remain intact and rigid even if wet.

Available with Mixed Media, 207c Carbon or Stock Grades of Carbon

208 - Good general Carbon grade suitable for many applications 209 - Copper Coated Carbon for use in Mueums and archives KI - For enhanced garlic odour removal

Typical Applications include:

- Elimination of Cooking Odours
- Removal of Kerosene Exhaust Fumes
- General Odour Removal
- Smoke Removal
- Neutralisation of Ammonia and its Derivatives
- Removal of Formaldehyde
- Removal of Airborne Pollutants and Contaminants
- Removal of Acid Gases





providing a better environment

STANDARD SIZES

No.	Nominal Size (Inches)	Height (mm)	Width (mm)	Depth (mm)	Weight of Carbon (Kg)	Cell Weight	Capacity @ 0.1 Second Dwell Time
PA-CF1-7C	24 x 24 x 8	594	594	197	10	22	800
PA-CF1-HALF-7C	24 x 12 x 8	594	291	197	5	11	400
PA-242412/8-7C	24 x 24 x 12	594	594	292	13	24	990
PA-121212-7C	12 x 12 x 12	297	297	297	6	12	450
PA-181812-7C	18 x 18 x 12	445	445	297	13	25	990
PA-241212-7C	24 x 12 x 12	594	297	297	13	25	990
PA-242412-7C	24 x 24 x 12	594	594	297	25	36	1900
PA-CF2-7C	24 x 24 x 16	594	594	397	18	34	1370
PA-CF2-HALF-7C	24 x 12 x 16	594	291	397	9	18	685
PA-WA15-208	24 x 6 x 18	144	600	440	7	13	533
PA-121218-7C	12 x 12 x 18	292	292	451	10	15	761
PA-181818-7C	18 x 18 x 18	445	445	451	19	26	1445
PA-241218-7C	24 x 12 x 18	594	297	451	18	26	1369
PA-242418-7C	24 x 24 x 18	594	594	451	36	52	2740
PA-121224-7C	12 x 12 x 24	292	292	597	13	19	990
PA-181824-7C	18 x 18 x 24	445	445	597	25	36	1900
PA-241224-7C	24 x 12 x 24	594	297	597	25	36	1900
PA-242424-7C	24 x 24 x 24	594	594	597	50	61	3800





purified chair®





VENT-AXIA BLACK SABRE SLIM CASE SICKLE FANS (BSC)



- Sizes 250 to 710 dia are protected to IP54.
- Motor Insulation Class F up to +70°C
- 450 to 710 dia, 3 phase motors, 2 speed as standard.
- All weather epoxy paint finish.
- Standard Thermal Overload Protection (S.T.O.P.).
- Performance tested to BS 848 Part 1.
- 5 Year Guarantee.

BLACK SABRE CASE MOUNTED SICKLE FANS

Black Sabre Sickle bladed fans are the latest addition to the Vent-Axia range offering improved pressure characteristics over axial units and lower sound levels. The advanced blade design and purpose built motor ensure excellent reliability and speed control.

CONSTRUCTION

The Black Sabre range share the same case lengths as the Cased axial range making them fully interchangeable and total compatibility with the full range of Vent-Axia Accessories. The strong and compact short case is constructed from rolled steel plate, electro welded and protected with a tough, epoxy paint finish. Casing dimensions are to DIN 24151 and flange dimensions are to ISO 6580. Manufacture is controlled to BS EN ISO 9001. The compact motor/impeller unit is robustly supported within the casing by electrowelded and epoxy coated steel rod mounting supports for ease of installation and service access. Suitable for all weather outdoor environments.

IMPELLERS

The motors and impellers are factory matched, statically and dynamically balanced to VDI 2060 Quality Class G.6.3.

MOTORS

The external rotor motors are specifically designed and styled for this range of fan. Ball bearings are greased for life. Sizes 250-710 motors are

Vent-Axia

protected to IP54, against dust and moisture complying with BS EN 60529. They have ribbed aluminium body castings for efficient cooling with Motor insulation to Class 'F' (from -40°C to + 70°C). Speed controlled sizes 450 to 710, 6 & 8 pole motors are only suitable for operating temperatures of up to 40°C.

ELECTRICAL

The Sabre range is available for either single phase 220-240V 50 Hz capacitor start and run or three phase 380-415V 50Hz. Motors are fitted with Standard Thermal Overload Protection (S.T.O.P.) which should be wired into all controller circuits and into starter contactors to prevent motor damage due to overloading / overheating. Three phase 380-415V 50Hz units, from 450 to 710 diameter are fitted as standard with 2 speed Delta/Star connection motors. Most units are suitable for speed control by either electronic, voltage reduction or frequency inverters where permissible.

FORM OF RUNNING

BLADE ROTATION Form B Motor Downstream

Cased mounted fans (ex-stock) are supplied for extract use (Form 'B' running).

TERMINAL BOX

An IP65 terminal box is supplied with all models with 20mm and PGII entry offering protection against dust and water jets from any angle.

PERFORMANCE

The fan performance, is in accordance with tests to BS 848 Part 1.

SOUND LEVELS

Fan sound levels, measured in a reverberant chamber in accordance with BS 848 Part 2. Published dB(A) figures are free field sound pressure levels at 3m with spherical propagation at a reference level of 2 x 10"Pa (20 micro-Pascal). The sound power level spectra figures are dB with a reference level of 10-12 Watts (1 pico-watt). To ensure minimum noise levels during speed control, an auto transformer speed control is recommended.

ACCESSORIES

A full range of accessories is available with the Sabre Slim Cased Sickle fans:

Electronic Speed Controllers. Auto Transformer Speed Controllers. Inverter Speed Controller, where permissible. D.O.L. Starters. Ancillary Packs. Flexible Connections. Mounting Feet. Coupling Flanges. Anti-Vibration Mounts. Attenuators.

BLACK SABRE SLIM CASE SICKLE FANS PERFORMANCE GUIDE

4 P	OLE									m3/s a	at Pa										
		Stock		IP														Motor	SC	FLC	dBA
Dia	Motor	Ref. No	r.p.m	Rating	0	25	50	75	100	125	150	175	200	225	250	300	350	kW	Amps	Amps	@3m
215	1 phase	BSC315-14	1400	IP54	0.581	0.532	0.463	0.381	0.222	0.179	0.123	0.057						0.12	2,12	0.53	47
315	3 phase	BSC315-34	1420	1P54	0.584	0.535	0.465	0.382	0.223	0.180	0.123	0.057						0.13	2.76	0.46	
266	1 phase	BSC355-14	1400	1P54	0.784	0.721	0.638	0.554	0.453	0.258	0.198	0.118						0.12	2.20	0.55	49
355	3 phase	BSC355-34	1400	IP54	0.835	0.770	0.682	0.592	0.488	0.282	0.226	0.175	0.083	-				0.15	2.52	0.56	
	1 phase	BSC400-14	1360	1P54	1.555	1.458	1.291	1.062	0.583	0.465	0.363							0.32	6.40	1.60	52
400	3 phase	BSC400-34	1380	IP54	1.555	1.458	1.291	1.062	0.583	0.465	0.363						_	0.36	4.40	1.10	JL
450	1 phase	BSC450-14	1280	IP54	1.902	1.885	1.720	1.602	1.495	1.280	0.860	0.742	0.640	0.508	0.383	0.114		0.63	11.20	2.80	54
450	3 phase	BSC450-34*	1340	IP54	1.976	1.891	1.781	1.667	1.514	1.326	0.890	0.748	0.642	0.508	0.382	0.113		0.59	7.80	1.30	
	1 phase	BSC500-14	1350	IP54	2.667	2.576	2.463	2.301	2.140	1.945	1.682	1.271	1.087	0.915	0.766	0.469	0.229	0.85	15.20	3.8 0	50
500	3 phase	BSC500-34*	1370	IP54	2.708	2.615	2.500	2.336	2.173	1.975	1.708	1.290	1.104	0.929	0.778	0.476	0.232	0.97	11.40	1.90	55
	1 phase	BSC560-14	1300	IP54	3.472	3.337	3.179	3.021	2.840	2.615	2.344	2.029	1.616	1.374	1.172	0.744	0.383	1.30	24.00	6.00	62
500	3 phase	BSC560-34*	1340	IP54	3.579	3.440	3.277	3.114	2.928	2.696	2,417	2.092	1.666	1.417	1.208	0.767	0.395	1.40	15.00	2.50	03
	1 phase	BSC630-14	1325	IP54	3.982	3.843	3.657	3.449	3.218	2.963	2.699	2,440	2.176	1.782	1.551	1.180	0.925	1.30	22.80	5.70	67
630	3 phase	BSC630-34*	1330	IP54	3.998	3.858	3.672	3.463	3.231	2.975	2.710	2.450	2.185	1.789	1.557	1.185	0.929	1.40	15.00	2.50	07

6 POLE

450	3 phase	BSC450-36*	1050	IP54	1.570	1.480	1.374	1.261	1.114	0.724	0.553	0.388	0.219			0.23	3.42	0.57	46
500	3 phase	BSC500-36*	900	IP54	2.336	2,196	2,045	1.894	1.720	1.487	1.092	0.813	0.569	0.348	0.127	0.27	3.72	0.62	48
560	3 phase	BSC560-36*	860	IP54	3.091	2.928	2.777	2.580	2:370	2.138	1.859	1.371	1.022	0.743	0.464	0.45	5.40	0.90	54
630	3 phase	BSC630-36*	880	IP54	3.486	3.277	3.068	2.812	2.556	2.324	2.045	1.720	1.255	0.813	0.464	0.74	9.00	1.50	58
710	1 phase	BSC710-16	860	IP54	4.311	4.013	3.652	3.269	2.840	2.006	1.616	1.330	1.037	0.766	0.518	0.90	16.00	4.00	60
/10	3 phase	BSC710-36*	920	IP54	4.444	4.137	3.765	3.370	2.928	2.068	1.666	1.371	1.069	0.790	0.534	1.00	15.60	2.60	00

8 POLE

710 3 phase	BSC710-38*	670	IP54	3.280	2.887	2.071	1.110	0.306	0.291		0.46	7.80	1.30	50
										S.C.	- 51	ARTING		ENT

F.L.C. = FULL LOAD CURRENT

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NOTE: All * models are supplied with 2 speed connection motors as standard. (Sizes 450-630 dia. are 4/6 pole, 710 are 6/8 pole). DELTA & (HIGH SPEED) STAR . (LOW SPEED)

ONLY SELECT THE FANS TYPED IN RED WHEN CONFIDENT OF YOUR SYSTEM RESISTANCE DATA.



VENT-AXIA **BLACK SABRE SLIM CASE SICKLE FANS** ACCESSORIES

				\sum		\bigcirc)		Ú	S
Stock Ref. No.	Electronic controller Stock Ref. No.	Auto transformer Stock Ref. No.	D.O.L starters & overload Stock Ref. No	Mounting feet Stock Ref. No.	Inlet wire guard Stock Ref. No.	Coupling flange Stock Ref. No.	Axial ancillary pack Stock Ref, No.	Cased axial attenuator Stock Ref. No.	Cased axial attenuator pod Stock Ref. No.	Anti- vibration mount Stock Ref. No.
BSC315-14	W103 03 102M	103 14 103	103 11 240 + 103 12 007	105 03 315	105 05 315	105 06 315	105 13 315	105 14 315	105 15 315	105 23 033
BSC315-34	1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 -	103 14 301	103 11 415 + 103 12 007				_			
BSC355-14	W103 03 102M	103 14 103	103 11 240+ 103 12 007	105 03 355	105 05 355	105 06 355	105 13 355	105 14 355	105 15 355	105 23 033
BSC355-34	(# 2)	103 14 301	103 11 415 + 103 12 007	1 2015/030/0388	000000000000000000000000000000000000000	202019/02/02/02/02	and the second s			
BSC400-14	W103 03 102M	103 14 103	103 11 240 + 103 12 027	105 03 400	105 05 400	105 06 400	105 13 400	105 14 400	105 15 400	105 23 033
BSC400-34		103 14 301	103 11 415 + 103 12 011	108318-00-5860	L'ACCEMPTOR (CAR)	0005555885-0006	19624201822018220	1.1883.2413103035		onan on anne.
BSC450-14	W103 03 103A	103 14 103	103 11 240 + 103 12 040	105 03 450	105 05 450	105 06 450	105 13 450	105 14 450	105 15 450	105 23 033
BSC450-34	543	103 14 301	103 11 415 + 103 12 018		100.000.000				STREET AND STREET	Sector Constant
BSC500-14	W103 03 106A	103 14 105	103 11 240 + 103 12 070	105 03 500	105 05 500	105 06 500	105 13 500	105 14 500	105 15 500	105 23 033
BSC500-34*		103 14 304	103 11 415 + 103 12 027	100 00 000						
BSC560-14	(im)		103 11 240 + 103 12 105	105 03 560	105 05 560	105 06 560	105 13 560	105 14 560	105 15 560	105 23 033
BSC560-34*			103 11 415 + 103 12 040	105 05 500	105 05 500	100 00 000	100 10 000	100 11000		
BSC630-14	14		103 11 240 + 103 12 070	105 03 630	105 05 630	105 06 630	105 13 630	105 14 630	105 15 630	105 23 033
BSC630-34	•	•	103 11 415 + 103 12 040	103 03 030	105 05 000	105 00 050	105 10 000	100 11 000		
BSC450-36*		103 14 301	103 11 415 + 103 12 007	105 03 450	105 05 450	105 06 450	105 13 450	105 14 450	105 15 450	105 23 033
BSC500-36	- 10 C	103 14 301	103 11 415 + 103 12 011	105 03 500	105 05 500	105 06 500	105 13 500	105 14 500	105 15 500	105 23 033
BSC560-36*		103 14 301	103 11 415 + 103 12 011	105 03 560	105 05 560	105 06 560	105 13 560	105 14 560	105 15 560	105 23 033
BSC630-36	(10)	103 14 301	103 11 415 + 103 12 018	105 03 630	105 05 630	105 06 630	105 13 630	105 14 630	105 15 630	105 23 033
BSC710-16	W103 03 106A	103 14 105	103 11 240 + 103 12 070	105 03 7104	105 05 710	105 06 7104	105 13 7104	105 14 7104	105 15 7104	105 23 033
BSC710-36*	N. 196	103 14 301	103 11 415 + 103 12 040	103 03 7104	103 03 7 10	100 00 7 10				

BSC 710-38*

103 14 304 103 11 415 + 103 12 018 105 03 710A 105 05 710 105 60 710A 105 13 710A 105 14 710A 105 15 710A 105 23 033

AN INVERTER SPEED CONTROL KIT IS AVAILABLE FOR:

BSC 560-34 - 103 20 302 09 BSC 630-34 - 103 20 302 09

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NOTE:- When speed control is required a 5-step auto transformer is recommended to ensure low noise levels.

NOTE:- All - models are supplied with 2 speed delta/star connection motors, as standard. (Sizes 450 to 630 are 4/6 Pole).

When speed control is required on all other models 5 a step auto transformer speed controller is recommended, to ensure low noise levels. Guards: Some installations may occur where additional safety parts are needed, to ensure safety in operation. For example, the unit may be fitted at the inlet or outlet end of a ducted ventilation system, thereby exposing the impeller/motor to unguarded access. In this event, the installer must fit a safety guard complying to current regulations. These guards are available as an optional extra.

BLACK SABRE SLIM CASE SICKLE FANS SOUND DATA

Sound Power Level Spectra dB (ref 10-12 Watts)

10015

Dia		63	125	250	500	1k	2k	4k	8k	dBA @ 3m
	Inlet	77	73	66	65	63	60	56	46	47
BSC315/4	Outlet	77	73	66	65	63	60	56	46	47
	Inlet	78	73	61	64	65	63	58	50	49
BSC355/4	Outlet	78	73	61	64	65	63	58	50	49
	Inlet	79	76	70	65	68	67	56	50	52
BSC400/4	Outlet	79	76	70	65	68	67	56	50	52
	Inlet	79	78	71	68	70	68	64	55	54
856450/4	Outlet	79	78	71	68	70	68	64	55	54
000000/4	Iniet	80	79	76	72	75	75	68	61	59
BSC500/4	Outlet	80	79	76	72	75	75	68	61	59
00000010	Inlet	82	81	80	79	79	77	74	65	63
BSC560/4	Outlet	82	81	80	79	79	77	74	65	63
000000/4	Inlet	83	85	82	83	84	80	79	66	67
BSC630/4	Outlet	83	85	82	83	84	80	79	66	67
6 POLE										
	Inlet	76	69	64	63	62	55	45	47	46
85C450/6	Outlet	76	69	64	63	62	55	45	47	46
0000000	Inlet	79	70	69	66	65	61	52	51	48
BSC200/6	Outlet	79	70	69	66	65	61	52	51	48
	Inlet	80	71	75	73	70	66	55	57	54
82C260/6	Outlet	80	71	75	73	70	66	55	57	54
	Inlet	81	71	80	79	73	67	56	61	58
85C630/6	Outlet	81	71	80	79	73	67	56	61	58
000740/0	Inlet	81	72	81	80	76	69	58	63	60
850/10/6	Outlet	81	72	81	80	76	69	58	63	60
8 POLE										
P\$C710/9	Inlet	75	70	70	69	68	58	53	53	50
3SC710/8	Outlet	75	70	70	69	68	58	53	53	50

Note: The above Sound Power Level Spectra is for B-Form Running Fans.

Published dBA figures, are free field sound levels at 3m, with spherical propagation at a reference level of 2 x 10⁴ Pa. The sound power level spectra figure, are dB with reference of 10⁻¹⁰ Watts.

To ensure minimum noise levels during speed control, an auto transformer speed controller is recommended.





CASED AXIAL ATTENUATOR

Stock Ref. No.	Øa	ьØ	Øc	d	Øe*	n	kg approx	Fitted with pod kg approx	Free area m ² without pod
105 14 315	415	355	315	475	M8	8	22	32	0.07793
105 14 355	455	395	355	540	M8	8	30	44	0.09898
105 14 400	500	450	400	600	M10	8	41	60	0.12566
105 14 450	550	500	450	675	M10	8	50	73	0.15904
105 14 500	600	560	500	750	M10	12	59	87	0.19635
105 14 560	660	620	560	840	M10	12	70	102	0.24630
105 14 630	730	690	630	940	M10	12	82	120	0.31172
105 14 710A	814	770	710	1070	M10	16	100	132	0.39567

*Threaded hole to take bolt

For Insertion Losses see page 49.



DIMENSIONS (mm)



ACCESSORY DIMENSIONS (mm)



MOUNTING FEET

Stock	100				0.				
Ker. No.	a	D	e	ų	0e		9		
105 03 315	275	24	224	224	10	14	115	177.5	167
105 03 355	303	24	250	250	10	14	125	197.5	187
105 03 400	348	24	280	280	12	14	135	225	213
105 03 450	384	24	315	315	12	14	155	250	238
105 03 500	425	24	315	315	12	14	135	280	268
105 03 560	475	24	355	355	12	14	155	310	298
105 03 630	520	24	400	400	12	14	175	345	333
105 03 710A	710	40	610	435	13	18	240	385	365





ANTI-VIBRATION MOUNTS

Stock Ref. No.	a	Øb	c	d	•	Øf	n	Max load kg
105 23 033	27	37	54	67	18.5	7	M8	23
105 23 055	27	37	54	67	18.5	7	M8	36
105 23 133	35	57	76	95	28.5	10.5	M12	91

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Stock Ref. No.	ØA	ØB	øc	D	ØE	No. Holes	Weight kg
BSC 315	315	355	386	170	10	8	10.5
BSC 355	355	395	426	170	10	8	13
BSC 400	400	450	487	170	12	8	15.5
BSC 450	450	500	537	180	12	8	20.5
BSC 500	500	560	595	180	12	12	33
BSC 560	560	620	655	240	12	12	31
BSC 630	630	690	725	240	12	12	38
BSC 710/4	710	770	806	350	12	16	65
BSC 710/6	710	770	806	240	12	16	65

Please note: "Dimension D is 240mm on 6-pole & 350mm on 4-pole version.



INLET WIRE GUARD 'K' factor loss 0.25

Stock		
Ref. No.	Øa	b
105 05 315	380	3
105 05 355	420	3
105 05 400	475	3
105 05 450	525	3
105 05 500	595	3
105 05 560	655	3
105 05 630	725	3
105 05 710	784	5



COUPLING FLANGE

Stock Ref. No.	Øa	ь	Øc	Ød	Øe	n
105 06 315	386	30	355	315	10	8
105 06 355	426	45	395	355	10	8
105 06 400	487	45	450	400	12	8
105 06 450	537	60	500	450	12	8
105 06 500	595	60	560	500	12	8
105 06 560	655	75	620	560	12	12
105 06 630	725	75	690	630	12	12
105 06 710A	800	40	770	710	12	16

BLACK SABRE SLIM CASE SICKLE FANS PERFORMANCE CURVES



Size 315 355 400 1 2 3

315 to 400 dia, 4 pole, 3 phase units



AIR VOLUME

Size 315 355 400 4 5 6

Vent-Axia

VENT-AXIA **BLACK SABRE SLIM CASE SICKLE FANS** PERFORMANCE CURVES

450 to 630 dia, 4 pole, 1 phase units



450 to 630 dia, 4 pole, 3 phase units



BLACK SABRE SLIM CASE SICKLE FANS PERFORMANCE CURVES



450 to 710 dia, 6 pole 3 phase & 710 dia 8 pole 3 phase units



Vent-Axia

BLACK SABRE SLIM CASE SICKLE FANS (BSC)



Pa 250

INTRODUCTION

This supporting document has been prepared in readiness for an application for Change of Use and is based on the DEFRA Annex B – Guidance on the control of odour and noise from Commercial Kitchen Exhaust system. This document has also reviewed the feedback from various Local Authorities who use Annex B as a guide when referring to the extract system as part of their decision making process. Annex B provides a useful guide to ventilation/extraction and ensures that no nuisance, disturbance or loss amenity is caused by odour, fumes, food droplets or noise, to nearby properties. A suitably qualified and experienced person with specialist knowledge of ventilation schemes should undertake the design and installation of a ventilation system. Designing and installing appropriate ventilation systems may involve considerable expense. In circumstances where the end user of the premises is unknown, or where the specific type of food to be cooked is unknown, the installation should be designed to achieve the highest level of odour control in order to cater for a worst case scenario. There are many different types of odour abatement available (carbon filters, electrostatic precipitation, high dilution and high velocity extraction) however not all types are suitable for all cooking methods. In each case, grease filters must be installed. Please note that any reference to minimum standards within this document is for guidance only and more stringent controls may be deemed appropriate.

PREAMBLE

Please be advised that the proposed cooking operation produces very little grease and the extract system is predominately removing heat and gas combustion fumes. All work is carried out in accordance with the latest relevant British (or Irish regulations where applicable) and European Standards, statutory Regulation and Byelaws together with the following publications:

CIBSE Codes and guides to current practice Water Authority By Laws HVCA – DW143 Practical Guide to Ductwork Leakage Testing HVCA DW144 Specification for Sheet Metal Ductwork HVCA DW172 Guide to Good Practice for Kitchen Ventilation Systems HVCA – RUAG70 Guide to Good Practice Refrigeration The Building Regulations Gas Safety (Installation and Use) Regulations 1998

All plant, ducts, pipe cables etc. shall be adequately protected against accidental damage corrosion and external environment and shall be capable of safe decontamination and removal in the future without disturbing other services. Pipes and ducts shall be adequately sized, kept as short as practicable, leak-proof with a minimum number of joints and have provision for routine maintenance. All facilities shall be designed to prevent the ingress or egress of rodents, vermin, and insects. The duct will be fixed to the shell of the unit using anti-vibration fixing mounts and under no circumstances will flexible ductwork be used other than the fan connections

The HVAC contractor shall supply the client with system design drawings, prior to manufacture and installation. For projects in England and Wales, the HVAC contractor shall also demonstrate compliance with Building Regulations Approved documents L2A & L2B. This will include:

(a) Provision of details of the efficiency and controls of heating, cooling and ventilation systems in accordance with Non-Domestic Heating, Cooling and Ventilation compliance Guide (2006)

(b) Provision of commissioning certificates including air leakage tests on the ductwork Fire/smoke dampers shall be installed in all fire compartment walls to Building Control requirements The HVAC contractor shall ensure that externally the ductwork conforms to the supplied drawings in terms of its route, height and termination. These drawings will have formed part of our Planning Approval and must not be deviated from without express permission from the Client. Upon completion of the installation, all shall be fully tested and proved including airflows. The contractor shall produce an Operating and Maintenance Manual which shall contain details of all equipment supplied and a record drawing of the complete mechanical services installation and copies of all Test Certificates. It shall contain a Maintenance Schedule based on the manufacturer's recommendations.

INFORMATION ON PREMISES & TYPE OF OPERATION

The following information should be supplied:

Number of meals to be served per day: - *approximately 100 meals on average per day.*

Method(s) of preparation and cooking: - Hand preparation and dry baking.

Type(s) of meal served: - *Pizzas and associated side orders.*

Proposed hours of operation of the business and any ventilation plant: - **Opening hours will be in** accordance with the hours stated in the Change of Use Approval although staff will be in the premises outside of these hours to prepare for opening and to clean up after closing. With the exception of the cold room compressor, ventilation plant will generally be in use only whilst the store is open.

PLANS AND DRAWINGS

A scaled plan showing the internal arrangement of the premises and the dimensions/location of the ventilation system must be provided. The drawings should include;

- 1. External elevations of the buildings showing the dimensions
- 2. Route and exhaust characteristics (appearance) of the ductwork in relation to the building: *Please see drawings*
- 3. The location of all filters and the fan should be clearly marked

Please note that where the location of a filter is shown the type must be clearly identified and crossreferenced to the detailed product specification: - *A schematic drawing produced by the HVAC Designer will be provided at a later date.*

PRE-FILTERS

A copy of the manufacturer's product data sheet should be supplied clearly showing:

1. Manufacturer's name: - Jasun Filtration

- 2. Filter name and product code: *Type 90*
- 3. Dimensions of the pre-filter: 45mm thick (rated airflow 2.0m/s) see data sheets
- 4. Nature of the filter media: Disposable glass fibre media
- 5. Manufacturer's recommendations on the frequency and type of maintenance of the pre-filter having regard to the conditions that it will be used under: Checked bi-monthly and changed 3 monthly

ELECTROSTATIC PRECIPITATORS (NOT REQUIRED ON THIS SITE)

CARBON FILTERS

Particulars and type of carbon filter units should be identified. A copy of the manufacturer's product data sheet should be supplied that clearly shows:

Pre-Filters

- 1. Manufacturer's name: Jasun Filtration
- 2. Pre-filters: For an airflow of 1.5 m/Sec two No 595 x 595 x 90 Type 90 G4 rated pre filters.
- 3. Frequency of inspection: *Monthly or bi-monthly inspections as required.*
- 4. Frequency of replacement: *3 monthly maximum. Carbon Filters*
- 5. Manufacturer's name: Jasun Filtration
- 6. Filter name and product code: AC207
- 7. Dimensions of the filter panel: 20 no panels, 10 each of models 1-224 and 1-2424, 10 no 292x594x20 + 10 no 594x594x20
- 8. Total number of filter panels in the filter bed: 20
- 9. Nature of the carbon (including product type): *Sutcliffe 207c 70% CTC*

Provide details on the frequency of replacement of the carbon units having regard to the conditions that it will be used under . The assumptions to this calculation should be clearly stated, including the frequency and duration of use. The manufacturer should provide recommendations on the frequency and type of maintenance required: -

Frequency of inspection of filter body – 3 monthly maximum. Frequency of inspection of carbon filters - annually. Frequency of replacement of carbon filters – annually or more frequently as required.

Total volume of carbon expressed in cubic metres: - 0.105m

- 1. Total mass of carbon expressed in kilograms: 46.9kg
- 2. Total surface area of the panels exposed to the exhausted air: 5.2m

Dwell time of the gases in the filter compartment and the control setting at which this is achieved: - In excess of 0.1 sec. This calculation is based upon the volume of carbon divided by the air volume to give the contact time.

Carbon Filters

- 1. Manufacturer's name: Purified Air
- 2. Filter name and product code
- 3. Dimensions of the filter panel: *Mini modules, each measuring 198x595x595mm*
- 4. Total number of filter panels in the filter bed: 6 mini modules

Nature of the carbon (including product type): -

Provide details on the frequency of replacement of the carbon units having regard to the conditions that it will be used under. The assumptions to this calculation should be clearly stated, including the frequency and duration of use. The manufacturer should provide recommendations on the frequency and type of maintenance required: - *Frequency of inspection of filter body – 3 monthly maximum. Frequency of inspection of carbon filters - annually. Frequency of replacement of carbon filters – annually or more frequently as required.*

Total volume of carbon expressed in cubic metres: - 0.22m

Total mass of carbon expressed in kilograms: - 100kg

Total surface area of the panels exposed to the exhausted air: -

Dwell time of the gases in the filter compartment and the control setting at which this is achieved: - In the region of 0.15 sec. This calculation is based upon the volume of carbon divided by the air volume to give the contact time. The 100 kg mass of carbon will give an increased dwell time in the region of 0.15 sec. This has been improved in line with current carbon filter installation trends and in order to significantly reduce the danger of odour carry over. Purified Air has over 30 years of odour control experience. Each 198mm mini module will treat 0.35 m3/sec of foul air so the installation of 6 No mini modules (or 2 no 595mm x 595mm x 595mm blocks) will adequately treat 2.1 m3/sec @ 0.1sec dwell time. For an extract volume of 1.5 m/s the dwell time will be in the region of 0.145 sec.

ODOUR COUNTERACTING OR NEUTRALISING SYSTEM (NOT REQUIRED)

COOKER HOOD

The following information on the characteristics of the cooker hood should be supplied that clearly shows the hood will made of: - *Stainless Steel construction with all visible joints to be welded, ground and polished and incorporating a gutter around all edges with a plugged drain connection at the lowest point.*

- 1. Length that the cooker hood overhangs the appliances: Minimum 250mm all round
- 2. Face velocity at the cooker hood, expressed in metres per second: 0.25m3/sec
- 3. Dimensions of the opening of the cooker hood: 2m x 3m

Or

- 4. Hood filters: Hood is to include 6no mesh type grease filters. Aluminium frame with steel mesh inserts.
- 5. Manufacturer's name: Jasun Filtration
- 6. Filter name and product code: Model GF

The proposed dry bake operation produces very little grease and the extract system is predominantly removing heat and gas combustion fumes. Mesh filters are much more efficient at removing any fine particles which may be caught in the airflow. There is no barrier to flame within the filter, and it is accepted that mesh filters cannot therefore be used on their own in applications where there is appreciable risk of fire. However this does not apply in this operation which only uses hot air for baking, with no oil or grease being used.

SYSTEM OPERATION

In addition to the specification of the components the following information must be provided about the system:

- 1. Extract rate (expressed as m/s) at the proposed rate of extract: *Calculated in accordance with DW172 Kitchen Designer's Manual, using the velocity of air across the face of the canopy method as per appended extract from DW172, the extract rate will be 1.5m/sec*
- 2. Dwell time of the gases in the carbon filtration zone: In excess of 0.1sec
- 3. Volume of the kitchen: based on average prep area size of 100 -150m
- 4. Efflux velocity: 12 to 15m/sec as per DW172 where possible but no lower than 11m/sec for a vertical discharge at high level or 6m/sec for horizontal discharge at low level via a louvred wall grille (whistling could occur at greater velocity but upturned louvres will be used to push the efflux in an upwards direction). Note: The system performance is dependent upon the extract rate of the air. Where the rate can be adjusted by the use of dampers or a variable speed fan, then the conditions under which the extract rate can be achieved must be described. = Single speed Vent Axia BSC500-14 fan no adjustment. This fan is IP54 rated which is acceptable as the fan is installed internally

FLUE DESIGN

The two important factors of the flue design are the height and velocity of the final discharge. Generally, the greater the flue height, the better the dispersion and dilution of odours. It is recommended that the discharge of air should be at a minimum height of 1m above the roof, especially if there are buildings nearby that may affect odour dispersion and dilution.

Where this is impractical for example, because of ownership or structural constraints, additional techniques will be required in order to reduce odours, such as an increase in efflux velocity and additional filters, etc. It is then recommended that the final discharge should be vertically upwards, unimpeded by flue terminals. The number of bends in the ducting should be minimised and the ducting should have a smooth internal surface. According to HVCA guidance (DW172) all ducting shall be low pressure Class A and be in accordance with HVCA specification number DW144.

In this particular case constraints imposed by the design and layout of the building preclude the provision of a high level ducted discharge. Instead it is proposed to run the 500mm diameter mm extract duct internally to pass through the side wall, towards the rear, terminating in a low level louvred wall grille.

NOISE

The following information should be provided is respect of the noise;

- 1. Data on the noise produced by the system as a whole
- 2. Sound power levels or sound pressure levels at given distances (the assumptions to this calculation must be clearly stated)
- 3. If possible, an octave band analysis of the noise produced by the system should also be provided.
- **4.** Hours of operation of the ventilation system (where this differs from the hours of opening) = *Hours of operation will be as the approved opening hours.*

The oven extract fan will be positioned internally to minimize noise break out and will be supported on antivibration mountings, high performance spring type vibration isolation hangers having a nominal static Deflection of a minimum of 15mm under the installed total weight of the fan, and connected with flexible couplings to the extract ducting either side. The vibration isolators must incorporate rubber or neoprene noise stop pads. Four isolators are normally required, one for each corner of the fan. The flexible couplings are to be "loose" (not taut) when installed and will typically be formed using rubber or neoprene sheet material (not canvas). The hangers or mounts should only take the weight of the fan –ductwork either side of the fan is to be mounted using separate proprietary rubber or neoprene mountings.

The Cold Room compressor is to be located internally within the rear area to minimize noise breakout. Compressors are to be mounted using proprietary rubber or neoprene turret type vibration isolators. The isolators should be selected to each have a static deflection of not less than 3mm under the load of the unit. Suitable turret type vibration isolators are approximately 25-30mm high and are available in various load capacities. The isolators are colour coded to indicate the load capacity and four isolators are required per unit (one to each corner). Ceilings between the A5 use and upper floors occupied by others are to be acoustically underlined, as noted on the drawings, to minimize noise transmission unless acoustic insulation has already been incorporated in the shell unit construction.

MAINTENANCE

A schedule of maintenance must be provided including details for:

- 1. Cleaning of washable grease filters: Weekly.
- 2. Frequency of inspection and replacement of all filters (grease filters, pre-filters and carbon filters where proposed): *Monthly or bi-monthly inspections as required.*
- 3. Inspection and servicing of fans: Bi-annually.

4. Inspection and cleaning of ductwork: - Based on a light use (2-6 hours per day) ducting should be cleaned annually, increased to 6 monthly for moderate use (6-12 hours per day).

If schedule is not based on manufacturer's instructions include the reasons why not: -

Please note that the HVAC contractor will provide 12 months spare filters at each new store.

ADDITIONAL NOTES FOR GUIDANCE

The air inlets must not permit pests to enter the kitchen. Fly screens are an example of how this can be achieved: - *All air intake and extract louvre grilles are to be fitted with screens to prevent the ingress of insects, birds and vermin.*

Sufficient air must be permitted into the premises to replace air extracted. The method for supplying this make-up air should be detailed: - *Fresh air is introduced via a louvred grille in the side wall,* towards the rear of the property. The dedicated air handling unit (AHU) will be located internally to minimize noise break out and will supply 80% of the extracted air. The AHU will be supported on antivibration mountings, high performance spring type vibration isolation hangers having a nominal static deflection of a minimum of 15mm under the installed total weight of the AHU, and connected with flexible couplings to supply air ducts which will run internally from the AHU to all parts of the premises. The vibration isolators must incorporate rubber or neoprene noise stop pads. Four isolators are normally required, one for each corner of the AHU. The flexible couplings are to be "loose" (not taut) when installed and will typically be formed using rubber or neoprene sheet material (not canvas). The hangers or mounts should only take the weight of the AHU - ductwork either side of the AHU to be mounted using separate proprietary rubber or neoprene mountings. Fresh air filtered to EU4, tempered via a low pressure hot water coil, will be introduced via ceiling mounted diffusers to the preparation, store, office and wash-up areas.

The route of the air into the kitchen must not result in its contamination, for example passage through a toilet. Separate provision must be made for ventilation of a toilet: - *Toilets are separately ventilated and fresh air to the rest of the premises will not be drawn through the toilets.*

There must be sufficient access points to permit adequate cleaning of all the ductwork: - Access panels will be installed within the ducting at changes in direction and at maximum 3m intervals, but usually access door centres will be every 2 metres, as the ductwork cleaners find it difficult to access 1.5metres of ductwork. All access panels are to be grease-tight.

TYPICAL COLD ROOM COMPRESSOR DETAILS

(typical unit) Karbox 2464

Dimensions

W 890 D 560 H 500

Weight 78 kg

Compressor	Model C	AJ2464	34.5cm		9.7 MRA	38 LRA				
Refrigerant	Suction	15.9mm	Liquid	9.5n	ım					
Connections										
Condenser Fan	:	220-1 Volts/Phase								
Motor		0.6 Amps each								
	:	2800 m⊡/hr Air	Flow							
Watts		4-6kW								
Electrical Detail	S	16 MRA								
	:	38 LRA								
Noise	:	34dBA @ 10m								

DATA SHEETS	
Jasun Filtration PLC - Canopy Filters	Model GF mesh Grease Filters
Vent-Axia - Extract Fan	Black Sabre Slim case sickle fans
Extract Page 16 from DW172	
Karbox 2464 Cold Room compressor	
Jasun Filtration PLC - Carbon Filters	AC207 Activated Carbon Panels
Jasun Filtration PLC - Carbon Filters	V line panel filter
Carbon Filter Solutions brochure o Carbon Filter Details brochure	

Carbon Filter Installations Generally the installation of carbon filters is undertaken as follows, the fan selection is changed to cater for the increased resistance given by the carbon filters, the area of carbon filter panels/ carbon weight has been calculated in conjunction with the supplier. In general terms for each cu/m of air moved for a dwell time of 0.1 sec 46.9kg of carbon will be required. The configuration of the filter housing ensures a minimum dwell time of 0.1 sec to ensure the necessary contact time with the vitiated air. The carbon filter granules are bonded together and formed in to panels which are contained in metal frames, a purpose made housing to contain the required number of panel has been designed and the panel are installed to form as vee section through the air must pass. The recommended carbon grade to be used is the Sutcliffe Carbon 207c. The life of the filter is dependent upon many factors use nature of air condition pre filtration is essential to prolong the life of the carbon panel and we recommend these are changed bi monthly. The fan selection altered from a cased axial fan to an in line mixed flow to overcome the additional resistance. In general terms the above describes the carbon filter installation and specification of materials employed.

CARBON FILTER MAINTENANCE SCHEDULE

IT IS IMPORTANT THAT YOU MAINTAIN YOUR FUME EXTRACT SYSTEM FOR THE FOLLOWING REASONS:

- 1. TO KEEP FLUE EMISSIONS TO A MINIMUM.
- 2. TO KEEP YOUR OVEN AND EXTRACT OPERABLE.
- 3. TO AVOID THE COSTLY REPLACEMENT OF THE CARBON FILTER CELLS.

WARNING! THE ACTIVATED CARBON FILTER CELL FILTRATION PACKAGE FITTED TO THIS EXTRACT INSTALLATION HAS A PRE-FILTER WHICH WILL ENSURE THAT GREASE AND SMOKE PARTICLES ARE PREVENTED FROM REACHING THE MAIN CARBON FILTER. FAILURE TO CARRY OUT THE FOLLOWING CHECKS WILL RESULT IN THE PREMATURE DETERIORATION OF THE FILTERS AND COULD LEAD TO PERMANENT DAMAGE TO THE FANS. THE INSTALLATION IS FITTED WITH A GAS SAFETY CUT OFF VALVE WHICH IS DEPENDANT ON THE DESIGNED AIRFLOW THROUGH THE SYSTEM. IF THE FILTER IS NOT MAINTAINED THE GAS SUPPLY TO THE OVENS WILL BE SHUT OFF DISABLING THE SYSTEM UNTIL THE FILTERS ARE REPLACED. TO ENSURE YOUR BRANCH CAN OPERATE WITHOUT INTERUPTION IT IS ESSENTIAL THAT THE FOLLOWING CHECKS ARE CARRIED OUT

EVERY 14 DAYS. CHECK THE PRE FILTERS TO ENSURE THAT NO GREASE BUILD UP OCCURS AND REPLACE AS NECESSARY.

EVERY 3 MONTHS

CHECK THE MAIN FILTER BODY FOR A BUILD UP OF GREASE AND DUST

EVERY 12 MONTHS. THE FILTERS ARE TO BE CHECKED BY A QUALIFIED HVAC ENGINEER A REPORT ON THE FILTER CONDITION WILL BE ISSUED IN WRITING WITH A RECOMMENDATION FOR REPLACEMENT OR CONTINUATION TO THE NEXT SEVICE INTERVAL.

14 London Road, Gloucester GL1 3NE

PLANNING, DESIGN AND ACCESS STATEMENT

INTRODUCTION

This Statement has been prepared by Designcom Architectural Services on behalf of Caprinos Pizza Group Ltd in support of an application for a change of use from a former retail unit (A1) to a hot food takeaway (Use Class A5) at 14 London Road, Gloucester GL1 3NE

The proposal also includes the installation of 1 no. oven air extract terminating at a louvred grill on the rear elevation. No change proposed to existing shopfront.

This Statement sets out the justification for the change of use, firstly by reviewing the site and its surroundings in terms of the relevant physical, social, economic and planning context.

It will then deal with the implications of the proposed ventilation equipment in terms of design and amenity. The Statement will also demonstrate how the proposal complies with both national and local planning policies.

This Statement should be read in conjunction with the full planning application, including the plans prepared.

SITE DESCRIPTION

The property is a two storey building of rendered brick construction under a flat felt roof and it comprises a retail unit on the ground floor with residential accommodation above. The unit is open plan with an understairs cupboard. It has a fully glazed frontage with pedestrian door and there is a secondary access to the rear. There is allocated parking to the rear. The Orchard Car Park 6 is off Great Western Road, this car park has 13 spaces.

THE PROPOSAL

The proposal is for the change of use from a former retail unit (A1) to a hot food takeaway (Use Class A5); the installation of extraction system no change is proposed to the shopfront.

The proposed takeaway will be occupied by Caprinos Pizza and will operate between 11am and 11pm. The proposed store will create approximately 15 jobs. The jobs will be part time and full time and employees will be sourced locally.

The customer service area will be located at the front of the store. The cooking area, including the 'bake and serve' area and cold rooms will be in the Centre of the store, the wash up area, staff area and WC located to the rear of the building.

A new extract duct will run from the oven through the store and terminate at a louvred grill at the rear elevation. The extract system will contain carbon filters to ensure the air expelled is clean and grease free. Further details of the ventilation and extraction system proposed are provided on the submitted plans, the Proforma Annex B document and the specification sheets. These documents provide more specific details of the noise emissions and design of the proposed equipment.

Any signage will be applied for at a later date.

The customers will utilise the entrance door to the front of the store. The delivery drivers will use the rear service door and front door. All food deliveries will be via Just eat, Uber eats delivery and Deliveroo

PLANNING ASSESSMENT

This section of the planning statement sets out the justification for the proposed change of use, extraction equipment when considered against the relevant planning policies and other material considerations.

The key issues arising from this proposal which this section will cover are as follows:

Principle of Development;

Impact on Residential Amenity; and Highways and Parking.

Each of the issues is discussed in turn below:

Principle of Development

This application seeks permission for the change of use of a former retail unit (A1) to A5 Use Class. It also seeks permission for the extraction equipment associated with the new pizza takeaway outlet.

The change of use is considered acceptable development and involves no loss of retail use. There would be no impact on local retail vitality or viability.

No extensions or alterations are proposed therefore the development would not impact on local character or amenity.

This is not thought to constitute an unhealthy concentration of takeaways.

It is clear that the change of use would enhance the vitality and viability of the local area.

The new takeaway will be occupied by Caprinos Pizza. There will be approximately 15 part time jobs created as a result of this change of use and most of these employees will come from the local area. As such the proposal will significantly help to boost the vitality and viability of the local area.

Overall, it is clear that this is a suitable location for a hot food takeaway and the proposal will not cause any harm to the character and viability of the local area as a shopping facility. As such, the change of use is compliant with current local policy.

b) Impact on Residential Amenity

In order to accommodate the new hot food takeaway a new extract duct will be installed at the site. The extract will run from the oven in the middle of the store and will terminate via a louvred grill at the rear elevation.

Usually, the discharge of air should be at a minimum height of 1 metre above the roof/eaves level, especially if there are buildings nearby that may affect odour dispersion and dilution. Where this is not possible (e.g. because of ownership or structural constraints), additional techniques will be required in order to reduce odours, such as an increase in efflux velocity and additional filters, etc.

The extraction system has been fitted with a carbon filter system to ensure that the air which is expelled is as clean as possible. More specific details of the filter system have been provided in the submitted Proforma Annex B document. As such, the proposal will not cause any harmful impact to the amenity of nearby occupiers in terms of odours, smoke or grease.

The extraction duct terminates at a louvred grille at the rear elevation. This is the least prominent elevation and therefore the grills will not be easily visible to members of the public. In addition, this is much more visually acceptable than a duct terminating at high level, which will be easily visible.

The proposed opening hours of the new hot food takeaway are between 11am and 11pm. and it is considered that the proposed opening hours would cause no harm to the amenity of nearby occupiers. Overall, it is considered that the proposal will cause no adverse impact on residential amenity in terms of noise and odour. As such, it is compliant with Local policy.

c) Highways and Parking

There is a parking area to the rear of the site which will be used by delivery drivers and by customers of the store and The Orchard Car Park 6 on Great Western Road, providing car parking for 13 cars.

In addition, there are a number of bus stops. As such, it is thought that there is an adequate existing parking solution.

There would be no impact on local amenity. The site has adequate existing access and parking for costumers is available in the local area

Given the site's location and its accessibility via public transport it is not considered that the proposals would lead to any harm to highway safety. In addition, it is thought that there is adequate parking for both delivery drivers and customers.

DESIGN AND ACCESS

Design

The proposal is for a Caprinos Pizza outlet which would create an additional service for local people.

The unit will incorporate a preparation and baking area, and a customer waiting area for those choosing not to use the home delivery option. There will also be a cold room, washing up area and WC within the store.

Internally, the appearance of the building will be changed by virtue of the investment brought to it by a renowned company. The introduction of Caprinos will refurbish the unit and create an operation that would provide employment and service locally.

Externally this application seeks only to make minor changes to the elevations through the installation of extract at the rear elevation, no alterations are proposed to the shopfront.

The proposed extraction equipment located at the rear of the building. It will not, therefore, be visible to members of the public. In addition, the extract duct will terminate at a louvred grill and does not rise above the ridge level of the building. As such, the extract duct will not be visible from nearby roads.

Overall, the proposal will preserve the character and appearance of the surrounding area and therefore will be compliant with Local Policy.

Access

There will be 1 customer entrance into the store. The entrance door will be level. The door is also in easy view of the counter and therefore members of staff will be able to see any customer who may be in need of help and go to their assistance if necessary.

Most visitors will access the site on foot and via public transport. There is a bus stop located within close proximity of the site, and this provides public transport links to and from the site.

Therefore, it is considered the site is within a sustainable location and can be easily accessed via existing public transport links.

CONCLUSIONS

It has been demonstrated that the proposed development would be compliant with both local and national planning policy. Furthermore, it has been demonstrated that the hot food takeaway will not have an adverse impact on residential amenity, the character and appearance of the surrounding area, or the local highway network.

The proposed change of use will make positive use of a vacant unit and support the vitality and viability of the local area by increasing footfall and providing job opportunities for the local residents.

It is for the reasons set out in this Statement that planning permission should be granted for this application.

5.5 Method 2 - Face Velocity Method (This is a provisional method when there is insufficient information available regarding the cooking equipment)

The volume of air to be extracted may be determined by selecting a velocity across the face area of the canopy that is appropriate for the type of appliances expected to be used. The capture velocity is multiplied by the canopy area to determine the volume of air to be extracted.

The capture velocity should be selected to ensure an even distribution of air across the canopy face, this velocity will vary according to the cooking application and whether the canopy is either wall or island mounted.

- Light loading 0.25 m/s. Applies to steaming ovens, boiling pans, bains marie and stock-pot stoves.
- Medium loading 0.35 m/s. Applies to deep fat fryers, bratt pans, solid and open top ranges and griddles.
- Heavy Loading 0.5 m/s. Applies to chargrills, mesquite and specialist broiler units.
- **5.6** Method 3 Appliance Power Input (This is a provisional method when there is insufficient information available regarding the cooking equipment)

When details of the cooking equipment to be used is limited to the amount of power required

rather than the physical size of the appliance, then the power input method may be used. Each type of appliance is allocated a recommended flow rate in m3/s which is then multiplied by the power input in kW to determine the flow rate required for each appliance. The total air required is then determined by adding together the recommended extract rate for each item of equipment.

5.7 Method 4 - Air Changes (This is a provisional method when there is insufficient information available regarding the cooking equipment)

These can vary widely depending on the size of kitchen, type of cooking, number of people present, and therefore not recommended as a method of calculating air volumes. Whilst 40 air changes per hour should be regarded as a minimum for comfort in the absence of any other information, it is not unusual for rates as high as 60 - 120 to be created when highoutput equipment is densely located in a relatively small space.

5.8 Method 5 - Linear Extract (This is a provisional method when there is insufficient information available regarding the cooking equipment)

Favoured in the United States, this method depends upon selecting a flow rate to suit a particular type of canopy. The figures, which are listed in the Table 5, do not vary with the canopy width and are given in m3/s per linear metre of active filter length.

Table 5: Flow rates (m³/s per linear metre of canopy)							
Type of Canopy	Light Duty	Medium Duty	Heavy Duty	Extra Heavy Duty			
Wall Mounted	0.23 - 0.31	0.31 - 0.46	0.31 - 0.62	0.54 +			
Single Island	0.39 - 0.46	0.46 - 0.62	0.46 - 0.93	0.85 +			
Double Island	0.23 - 0.31	0.31 - 0.46	0.39 - 0.62	0.77 +			
Eyebrow	0.23 - 0.39	0.23 - 0.39					
Passover/Backshelf	0.15 - 0.31	0.31 - 0.46	0.46 - 0.62	not recommended			

NB - Extract rates for double island canopies are for active filter length, i.e. double the rate for an equivalent length wall Canopy.



HOUSED HERMETIC CONDENSING UNIT

Model	Karbox 2464
Compressor	CAJ2464Z
Duty	
@ -6 ⁰ c Evaporating	3100 watts*
@ -30 ⁰ c Evaporating	1125 watts*
Dimensions	
Width	890
Depth	560
Height	500
Connections	
Suction	1/2″
Liquid	3/8″
Voltage	1~ - 220v-240v- 50Hz
Current	
Start	39 amps
Run	10.5 amps
Noise Level	
@ 1 metre	56dBA
@ 5 metre	48dBA
@ 10 metre	34dBA



* based on condensing temperature of 55 ⁰C





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