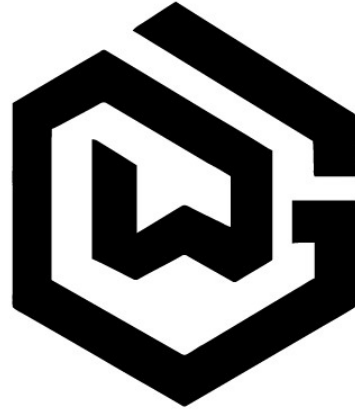


3 ECHO SQUARE

DA12 1NP

VENTILATION
ASSESSMENT

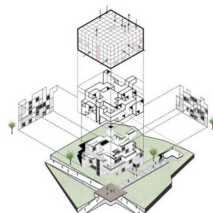


GOYA WORKS

GOYA WORKS LTD

10/08/2023

Project No: G0096

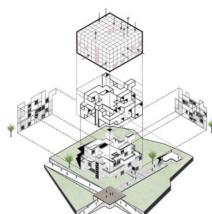


Notice

This document and its contents have been prepared on behalf of Oaklands Property & Developments Limited and are intended solely for their information and use, in relation to the issues relating to 3 Echo Square. Mr Kit Harding assumes that no responsibility to any other party in respect of, or arising out of or in connection with, this document and/or its contents or for the use of this report for any other purpose.

Document History

Revision	Purpose description		Origination	Reviewed	Authorised	Date
1	Issued for comment		GK	YS	GK	10/08/23
2						
Client		Oaklands Property & Developments Limited				
Address		3 ECHO SQUARE				
Document title		Report on Kitchen Extract				
Job No.		G0096				
Version		1				
Document reference		G0096-1				
COMMENTS:						



DETAILS OF THE GEASE FILTER

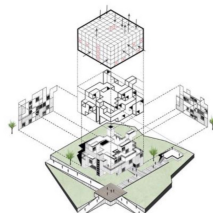
1	Manufacturer's Name	Longar Industries LTD
2	Filter name and product code	Longar TYPE2 Baffle Filter
3	Dimensions of the filter	395x395x45mm
4	Nature of the filter media	Filters are manufactured with stainless steel 430 polished finish, MAX operating temp. 400°C
5	Manufacturer's recommendation of the frequency and type of maintenance of the pre filter	Filters should be cleaned by a trained operative either daily for heavy use or weekly for light use

DETAILS OF THE PRE-FILTER

6	Manufacturer's name	PurifiedAir
7	Filter name and product code/name	Bag Filter
8	Dimensions of the filter	610x610mm
9	Nature of the filter media	synthetic microfibres
10	Manufacturer's recommendation on the frequency and type of maintenance of the pre-filter	Replace it once every 4 months

CARBON FILTER OR OTHER ODOUR ABATEMENT METHOD

11	Unit 1 - Dimensions of the filter name	CARBON FILTER
12	Total number of filter panels in the filter bed / lambs	12
13	Nature of the filter	CARBON BLOCKS
14	Dwell time of the gases in the filter compartment and the setting of the control at which this is achieved	0.2
15	Total mass of item expressed in kilograms	200kg
16	Unit 2 - Dimensions of the filter name	N/A
17	Total number of filter panels in the filter bed / lambs	N/A
18	Nature of the filter	N/A
19	Dwell time of the gases in the filter compartment and the setting of the control at which this is achieved	N/A
20	Total mass of item expressed in kilograms	N/A
21	How to proposed to access the filter unit	From units access panels



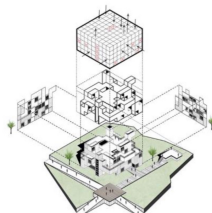
22	Manufacturer`s name	Purified Air
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COOKER HOOD

23	The length the cooker hood overhangs the appliances	3700mm x 1300mm Stainless Steel
24	The face velocity at the cooker hood, expressed in metres per second	Canopy face area 4.8 m ² 0.3 m/s face velocity
25	Dimensions of the opening of the cooker hood	3700X1300X500

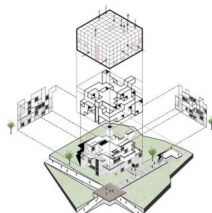
SYSTEM OPERATION

26	The extract rate (expressed as m ³ /s) at the proposed rate of extract.	1.1 m ³ / s
27	The volume of the space to be ventilated in m ³	80m ³
28	The efflux speed at the flue terminal	15 m/s
29	The type of flue terminal to be fitted	Jet Cowl
30	Name and address of company to install system	Goya Works Ltd
31	Cleaning of washable grease filters. Frequency and method please describe.	Daily at least once of 2 day The filters should wash with warm soapy water
32	Frequency of inspection and replacement of the pre-filters please describe	Change filters every two weeks
33	Frequency of deep clean to fan and flue please describe.	Light use 12 months Moderate use 6 months Heavy use 4 months



NOISE

34	Specify the fan type, its sound power level and sound frequency characteristics and provide a manufacturer`s specification sheet showing those values	Helios GBW560 - Lw Details Breakout 62 db Intake 79db Exhaust 83 db Sound press cage break out 66db in 4m
35	Describe how the fan and ducting will be isolated from the building	Duct work will be mounted on brackets, which will be fitted onto wall using anti vibration mounts. this will eliminate any vibration from the duct work to the building. Fan will also be fitted using anti vibration mounts and also there will be flexible connection between fan and duct work.



GigaBox and accessory



■ Application

Multifunctional fan box, suitable for medium to higher air flow volumes against high resistances in every type of ventilation system. The compact frame construction offers easy conversion of the outlet position. Together with a choice of ideal accessories make these units ideal for all applications.

The GB.. T120 types are suitable for the extraction of dirty, humid and hot air up to max. 120° C, i.e. as extract air fan in commercial kitchens and many applications of process technology.

■ Casing

Self-supporting frame construction from aluminium hollow profiles. Double-walled side panels from galvanised sheet steel, lined with 20 mm thick temperature insulating and flame-retardant mineral wool.

Intake cone for ideal airflow, spigot and flexible connector for duct connection. With outlet adapter (from square to circular) on the exhaust side for low-loss discharge and flexible connector to reduce vibration transmission. The flexible connectors are supplied as standard and correspond to the max. permissible air flow temperature of +70 °C and/or +120 °C with the types GB.. T120. Lifting lugs are standard for using crane hooks.

With GB.. T120 the motor is located outside of the air flow. The thermally insulated partition panel is also the support plate for the motor and impeller unit and can be removed completely for inspection without removing the complete fan from the system.

■ Speed control

All types (except GBD 630/4 T120) are speed controllable by voltage reduction using a 5-step transformer controller or an electronic controller. The 3-phase models can also be 2 speed controlled by star/delta switch (accessories DS 2 or full motor protection unit M 4). The performances of the speeds are given in the performance curve. 3-phase models are controllable with frequency inverters by installation of a sinusoidal filter (accessories) between inverter and motor. Type GBD 630/4 is only controllable by frequency inverter.

■ Assembly

□ Assembly of types GB..

Adaptable installation position and flexible assembly using the five possible discharge directions via the discharge adapter. Removable panels allow inspection access on all sides.

□ Assembly of types GB.. T120

Installation must be carried out with condensation discharge showing downward. Flexible assembly by three possible centrifugal discharge directions via the discharge adapter. Inspection cover with handle, for cleaning and maintenance simply remove. Lifting lugs are standard for using crane hooks. Vibration transmission to the building is minimised by anti vibration mounts (type SDD-U, accessories). Vibration transmission to the ducting is prevented by using the standard flexible connector supplied.

■ Impeller

Smooth running centrifugal impeller with backward curved polymer blades (size 250 from steel) on a galvanised steel back plate, direct driven. Size 500 and all GB.. T120 types with impellers from aluminium. These energy efficient impellers are low noise. Dynamically balanced assembled with the motor to DIN ISO 1940 Pt.1 – class 6.3 or 2.5.

■ Motor

IEC-standard motor or maintenance-free external rotor motor protected to IP 54 or 44. Thermal overload protection through built-in thermal contacts. Suitable for continuous operation S1. Insulation class F. Ball bearings are lubricated for life.

■ Electrical connection

Terminal box protection to IP 54.

■ Air flow direction

The air flow direction of centrifugal fans is not reversible, but can be set by positioning the fan to the required air flow direction. Furthermore the position can be set individually to constructional conditions through conversion of discharge adapter and panels. The correct motor rotation direction is marked through rotation arrows on the motor and has to be checked at start-up.

■ Incorrect direction of rotation

If the fan is operated in the incorrect direction of rotation the motor will overheat and the thermal contact will trip. Typical indication for this is a very low air flow combined with high noise levels and vibration.

■ Ambient temperature

The maximum permitted air flow temperature is given in the individual fan chart.

■ Surrounding temperature

From – 40° C to + 40° C.

Information	Pages
Design of systems, acoustic	12 on
General techn. information, speed control	17 on

Type GB..	Sound press. Case breakout	Sound press. Intake	Air flow volume $\dot{V}$ m³/s against static pressure												
	L _{PA} dB(A)	L _{PA} dB(A)	(ΔP _{stat.}) in Pa												
	at 4 m	at 4 m	0	50	100	150	200	250	300	350	400	500	600	700	800
GBW 250/4	27	39	0.389	0.319	0.244	0.147									
GBW 315/4	29	41	0.414	0.361	0.300	0.236	0.153	0.042							
GBW 355/4	34	46	0.817	0.747	0.675	0.594	0.505	0.400	0.258						
GBD 355/4/4	34	46	0.836	0.772	0.711	0.638	0.577	0.492	0.367	0.089					
GBW 400/4	38	50	1.142	1.092	1.036	0.975	0.917	0.85	0.764	0.656	0.511				
GBD 400/4/4	38	50	1.097	1.031	0.961	0.889	0.811	0.725	0.628	0.469	0.114				
GBW 450/4	40	52	1.514	1.433	1.361	1.292	1.217	1.122	1.006	0.867	0.692	0.083			
GBD 450/4/4	40	52	1.514	1.431	1.344	1.256	1.161	1.061	0.947	0.822	0.664	0.083			
GBW 500/4	45	57	2.333	2.236	2.139	2.042	1.947	1.85	1.744	1.628	1.506	1.219	0.778	0.042	
GBD 500/4/4	44	57	2.458	2.367	2.278	2.189	2.097	2.006	1.903	1.789	1.664	1.369	0.947	0.014	
GBW 500/6	35	46	1.600	1.478	1.347	1.189	0.978	0.678	0.144						
GBD 560/4/4	44	57	3.497	3.397	3.300	3.203	3.106	3.011	2.911	2.811	2.706	2.461	2.142	1.731	1.144
GBD 560/6/6	35	48	2.400	2.261	2.114	1.953	1.767	1.539	1.239	0.767					
GBD 630/4/4	48	61	4.153	4.058	3.961	3.869	3.775	3.683	3.592	3.500	3.403	3.194	2.953	2.675	2.333
GBD 630/6/6	43	56	3.192	2.992	2.794	2.597	2.375	2.103	1.767	1.356	0.792				
GBD 710/6/6	46	59	5.194	4.989	4.783	4.564	4.333	4.083	3.811	3.511	3.178	2.333	0.753		
Type GB.. T120	L _{PA} dB(A)	L _{PA} dB(A)	(ΔP _{stat.}) in Pa												
	at 4 m	at 4 m	0	50	100	150	200	250	300	350	400	500	600	700	800
GBW 355/4 T120	36	49	0.961	0.894	0.831	0.767	0.683	0.567	0.418	0.201					
GBD 355/4/4 T120	36	49	0.964	0.908	0.846	0.778	0.697	0.594	0.469	0.192					
GBW 400/4 T120	40	53	1.369	1.293	1.217	1.136	1.053	0.942	0.806	0.622	0.439				
GBD 400/4/4 T120	40	53	1.353	1.275	1.193	1.106	1.014	0.900	0.761	0.581	0.381				
GBW 450/4 T120	45	57	1.975	1.887	1.800	1.700	1.625	1.525	1.426	1.317	1.208	0.917	0.528		
GBD 450/4/4 T120	45	57	1.994	1.914	1.833	1.750	1.653	1.556	1.450	1.336	1.206	0.897	0.372		
GBW 500/4 T120	45	59	2.318	2.244	2.158	2.075	1.989	1.903	1.800	1.696	1.575	1.300	0.975	0.511	
GBD 500/4/4 T120	45	59	2.319	2.239	2.157	2.081	1.994	0.191	1.833	1.739	1.642	1.381	1.061	0.533	
GBD 560/4/4 T120	48	62	3.417	3.322	3.247	3.164	3.078	2.994	2.910	2.817	2.722	2.533	2.336	2.064	1.671
GBD 630/4 T120	53	67	3.928	3.867	3.803	3.742	3.667	3.594	3.533	3.469	3.397	3.242	3.097	2.908	2.703

Special application for GigaBox T120 – commercial kitchens

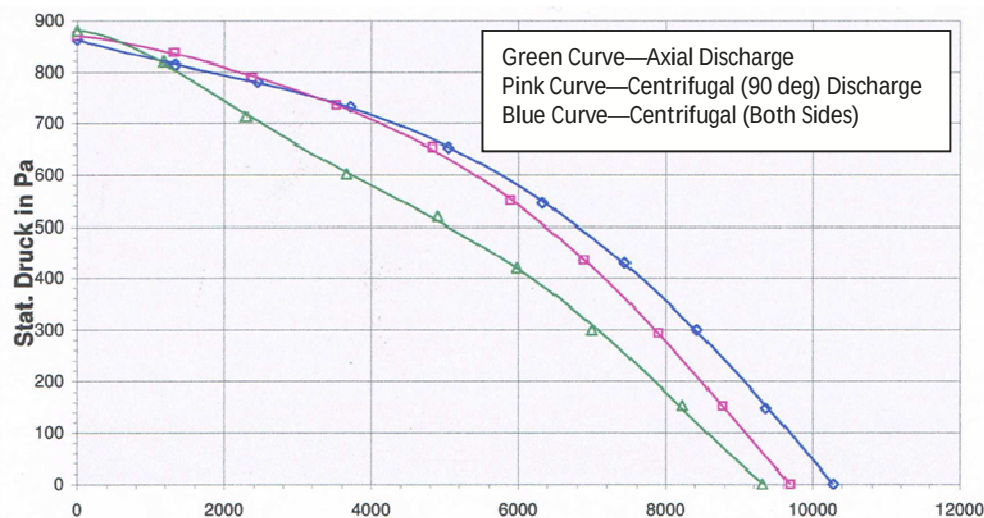
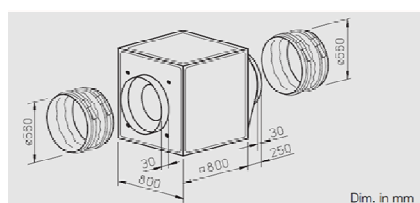
For the design of exhaust air systems in commercial kitchens the VDI 2052 (2006) "Ventilation equipment for kitchens – design, layout, approval" is applied. This follows for extract air fan:

- ☐ Fans of exhaust air systems must be designed and installed in such a way that they are easily accessible, can be easily controlled and cleaned.
- They must be able to be switched off from the kitchen.
- The motors must be located outside of the extract air flow.
- Connected kitchen extraction hoods must separate solid and liquid components, if possible.
- A backdraft into following units is to be prevented.

These specific requirements from the GigaBoxes GB.. T120 are fulfilled in an outstanding manner. Easily accessible casing and double-walled side panels make cleaning simple with grease dissolving agents and steam possible.

Requirements in excess thereof of kitchen extract air units and the appropriate fire protection can deviate country-specifically; these special requirements of the respective country, in which the unit is to be used, must be considered.

GBW 560/4


 Δp_{stat}
Pa

Frequency		Hz	Total	125	250	500	1k	2k	4k	8k
L _{WA}	Case breakout	dB(A)	64	64	64	48	50	46	43	37
L _{WA}	Intake	dB(A)	77	57	66	69	74	70	64	55
L _{WA}	Extract	dB(A)	81	62	74	75	75	74	70	61

Self supporting frame construction from aluminium hollow profiles. Double-walled side panels from galvanised sheet steel. Intake cone for ideal airflow, spigot and flexible connector for duct connection. With discharge adapter (square to circular) on the pressure side for low-loss discharge and flexible sleeve to reduce vibration transmission. Simple positioning by standard crane hooks. Installation must be carried out with condensation discharge showing downward. Flexible assembly by three possible centrifugal discharge directions via discharge adapter. Outdoor installation is possible using outdoor cover hood and external weather louvres (accessories).

Impeller:

Smooth running backward curved aluminium centrifugal impeller highly efficient and direct driven. Energy efficient with a low noise development. Dynamically balanced together with the motor to DIN ISO 1940 Pt.1 - class 6.3

Motor:

Maintenance free external rotor motor or IEC standard motor protected to IP 44 and 54. With ball bearings and radio suppressed as standard.

Electrical Connection:

Standard terminal box (IP54) fitted on the motor support plate.

Motor Protection:

Motors have thermal contacts wired to the terminal block and must be connected to a motor protection unit.

Speed Control:

Speed controllable by voltage reduction using transformer controller.

Type	Ref. No.	R.P.M.	Sound Level	Motor power (nominal)	Current Full Load	Maximum air flow temp.	Nom. weight (net)	5 step trans. controller	
		min ⁻¹	dB(A) at 4 m	kW	Amps	+°C	kg	Type	Ref.
GBW 560/4	5508	1370	44	2.0	8.7	60	90	TSW 10	1498

Volume Flow m³/s against static pressure

0	50	100	150	200	250	300	400	500	600	700	800
2.77	2.72	2.55	2.48	2.41	2.31	2.22	2.0	1.72	1.44	1.00	0.36

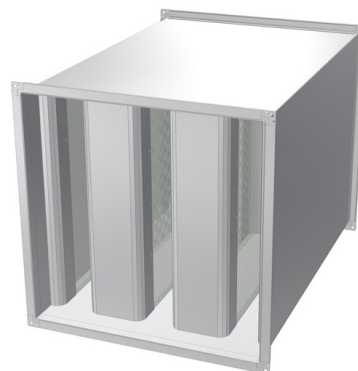
Type Ref.

R02 Rectangular Silencers

R02 - 2 - Attenuator

Available in seven standard lengths R02 2 Rectangular Duct Mounted Silencers have excellent attenuation properties, achieved with sound absorbing infill splitters, retained in the attenuator casing by a perforated liner. The resistance to airflow is a function of the face velocity and length. It is not recommended to select the R02 2 Silencers with a face velocity above 2.5 metres per second without asking advice regarding re-generated self noise. We can advise on the selections and can perform system analysis to ensure the correct unit is specified.

- High performance rectangular duct silencer
- Seven standard lengths
- Many connection options
- Cross section dimensions in 1mm increments
- System pressure within ducted systems to 1500 Pa
- Special lengths on request



Insertion Loss (dB) - Centre Band Frequency

Product Code	Length (mm)	63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz
R02 - 2 - 600	600	7	12	20	31	39	40	38	27
R02 - 2 - 900	900	9	16	25	42	50	50	50	41
R02 - 2 - 1200	1200	11	20	20	50	50	50	50	48
R02 - 2 - 1500	1500	13	24	25	50	50	50	50	50
R02 - 2 - 1800	1800	15	30	20	50	50	50	50	50
R02 - 2 - 2100	2100	16	33	25	50	50	50	50	50
R02 - 2 - 2400	2400	7	38	20	50	50	50	50	50

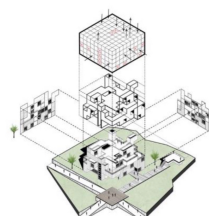
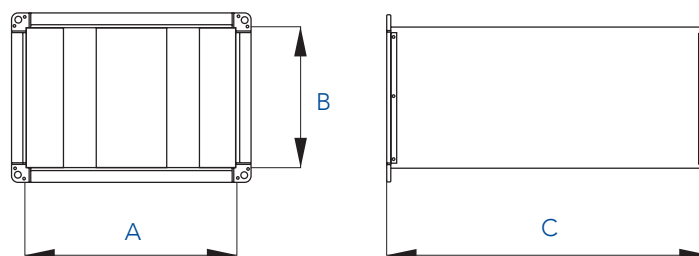
Insertion loss data is derived from continual testing to BS4718 and other standards in independent UKAS certified laboratories, which includes where appropriate, re-generated or self noise testing in both forward and reverse flow conditions. If you request system analysis from our technicians all predictions will be assessed using the relevant certified insertion loss data together with relevant dynamic corrections.

Dimensional Data

Code	A Min	A Max	B Min	B Max	C Min	C Max
R01 - 2	100	1200	100	1200	400	2400

Resistance to Airflow (Pa)

Product Code	1.0m/s	1.5m/s	2.0m/s	2.5m/s	3.0m/s
R02 - 2 - 600	9	29	52	80	108
R02 - 2 - 900	9	30	54	82	111
R02 - 2 - 1200	10	31	55	84	114
R02 - 2 - 1500	10	31	56	85	116
R02 - 2 - 1800	11	32	57	88	119
R02 - 2 - 2100	11	34	57	90	123
R02 - 2 - 2400	12	36	60	95	133



R02 Rectangular Silencers



Material & Finish

All components are manufactured from mill finish hot dip galvanised mild steel conforming to EN10327 (BS2989). To prevent erosion of absorbing materials, the R Series Silencers are fitted with perforated splitters manufactured from galvanised mild steel conforming to EN10327 (BS2989). R Series Silencers utilise acoustic grade mineral fibre absorbing infill and are manufactured to the HVCA specification DW144 class B and M&E 100 for sheet steel thickness and stiffening.

Pressure Up to 1500 Pascals positive and negative.

Temperature -12° to +100°C.

Location Internally & externally mountable.

Melinex Lining (Optional)

Where moist conditions exist (e.g. process systems) or for critically clean applications (e.g. hospitals) the sound absorbing material may be required to be fully sealed by Melinex lining to prevent fibre migration. This will however, effect the acoustic performance of the silencer. Please contact us to discuss your requirements.

Alternative Specification

The above specification refers to our standard, stock range. We can also supply custom materials such as 304 and 316 grade stainless steels, cold reduced (CR4) mild steel and aluminium.

Dimensional Data

Units smaller than the minimum and larger than the maximum with the same aero-acoustic performances are available, but may have different manufacturing methods and are therefore coded accordingly.

Connection Options	
MEX Flanges	20, 30 & 40mm
Ductmate Flanges	25 & 35mm
Circular Spigot	"SPIRAL FIT" circular spigots, can be offset.
Rectangular Spigot	Rectangular spigots, can be offset
Raw	Plan end for slip jointing etc.

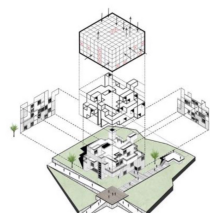
Installation

For recommendations for the support of the fan the principles of Part Six (pages 43-46) of the HVCA DW144 standard should be followed. Always use the correct size bolts as specified in the dimensional data table above. The arcuate holes are sized to allow the metric thread sizes to be utilised, for example, for an M10 fixing, the slot is made 19mm long by 13mm wide. Please contact us to confirm the suitability of any fan manufacturers product.

Equipment	Location
Centrifugal Fans	Position at least one duct width from inlet or outlet.
Axial Fans	Position at least one duct width from inlet or outlet.
Mixed Flow Fans	Position at least one duct width from inlet or outlet.
Ductwork Bends	Position at least three duct widths from inlet or outlet. One duct width will increase resistance by 90%, two by 20%. Ensure splitters are in parallel plane to bend.
Ductwork Reducers	Direct couple only with reducers of maximum 15° cheek slope.
Finned Coils & Filters	Leave 500mm plenum between silencer and coil or filter, and suitable reducer as specified in HVCA DW/144 1998.

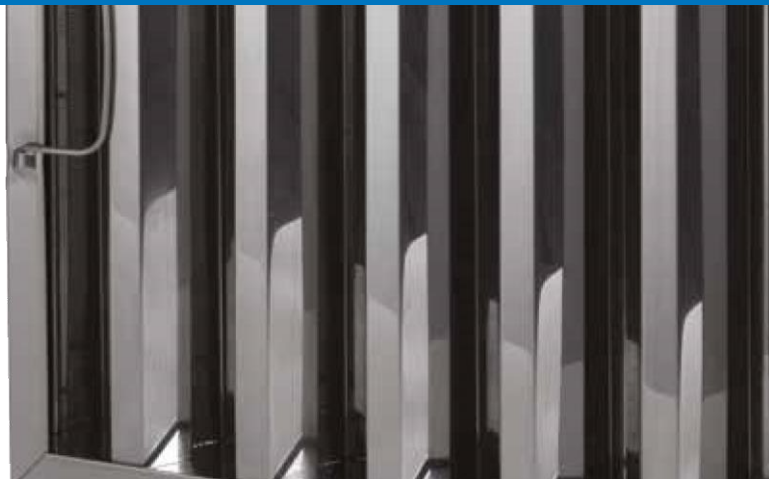
Cleaning & Maintenance

Should the product require routine cleaning we recommend low-pressure air blasting, vacuuming or wiping the exposed surfaces with a damp cloth. It is not unusual for "White Zinc Oxide" to develop on galvanised silencers when the zinc in the galvanising reacts electrolytically with moisture. Silencers are of a passive nature and as such require no routine maintenance or lubrication.



LONGAR® Type 2

High Performance Premium Baffle Filter



LONGAR® TYPE 2 FEATURES:

- 100% Flame barrier protection to DIN 18869-5.
- Cutsafe safety edges.
- Fully welded construction – all stainless steel construction.
- Meets insurance requirements.
- Meets HVCA DW172 requirements.
- Folding handles and drainholes as standard.
- Robust baffle filter construction – built to last.
- Tested & certified to European standard DIN 18869-5.
- Tested & certified to American standard UL1046.
- Tested & certified to ASTM2519.

APPLICATIONS

- Commercial kitchens
- Water mist separation
- Spark arrestors
- Sand filtration
- Grease filtration

MAINTENANCE

- All maintenance should be carried out in accordance with the planned maintenance set by installation contractor.
- When handling any components suitable PPE should be used - gloves, eye protection and access equipment.
- Filters should be cleaned by a trained operative either daily for heavy use or weekly for light use.
- For more exact guide to cleaning you should contact a cleaning specialist.

PACKAGING

- All units are packaged in double wall boxes with separators for standard sizes, glued closed for protection whilst in transit against contamination.

FILTER CLASSIFICATION:

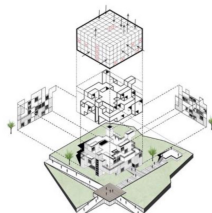
- Filter Class G2
- UL Class 2

TESTED TO:

- DIN 18869-5
- UL 1046
- ASTM 2519

MANUFACTURED TO:

- DW172• ISO9001



Absolute (HEPA) Filters

To qualify to be called a High-Efficiency Particulate Air or HEPA filter, the filter must be able to remove, from the air that passes through it, 99.97% of particles down to a sub-micron level. Our main use of HEPA filtration is the removal of smoke particles.

We do supply many different sizes and grades of HEPA filters so please contact us with your requirements.



Bag Filters

Our general purpose bag filters are manufactured using a galvanised steel header to retain the pocket sets.

The pockets are produced from synthetic micro-fibres specifically designed for use in air filtration. They can be applied as a pre filter to carbon cells in malodour extraction, taking out oil and grease particles ahead of the carbon filter stage.



LONGAR® TYPE 2 PREMIUM BAFFLE FILTER

For use in commercial kitchens and ventilation to extract grease laden air and act as a fire barrier. Fire barriers prevent any cooking flames traveling past the extract canopy. The new Type 2 is a development of customers requesting certain attributes for the baffle filter, the main ones being safety edges on frame and blades. LONGAR® Type 2 is available in standard depths of 20mm and 45mm depths, this is required for the filter to operate at a constant efficiency and to protect the system as a flame barrier as tested to European Standard DIN 18869-5 and American Standard UL1046. Custom sizes are available on request.

CONSTRUCTION / MATERIAL SPECIFICATIONS

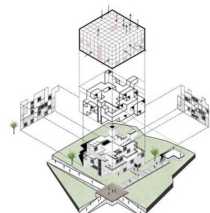
As standard all baffles are manufactured with Stainless Steel 430 polished finish, (Other finishes and materials are available). Maximum Operating temperature 400C or 750F.

FITTING INSTRUCTIONS

- Fit products, handles in direction of air in.
- Product vertical in air stream.

HANDLING

- Handle with care when unpacking.
- Store in dry and frost protected place.



Will require two people plus lifting equipment to carry and install.



Carbon PA242424

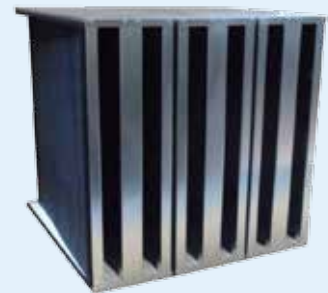
Size	594 x 594 x 597
Gross Weight	68.2Kg
Carbon Weight	50Kg
Rated Airflow	3600m ³ /hr*
Pressure Drop	120Pa

Safe for one person to carry.
No special lifting equipment required.



Sitesafe PA240824

Size	594 x 196 x 597
Gross Weight	17.95Kg
Carbon Weight	16.6Kg
Rated Airflow	1200m ³ /hr*
Pressure Drop	120Pa



Sitesafe 3 x PA240824

Size	594 x 594 x 597
Gross Weight	53.85Kg
Carbon Weight	50Kg
Rated Airflow	3600m ³ /hr*
Pressure Drop	120Pa

*Rated Airflow based on a dwell time of 0.1 seconds. Available in all sizes to retrofit carbon cells

Carbon Filter Cell Part Number	Nominal Size (inches)	Height (mm)	Width (mm)	Depth (mm)	Weight of Encased Carbon (Kg)	Weight of Entire Cell (Kg)	Capacity @ 0.1 Second Dwell Time M3/h
PA-240824-7C "Site Safe"	24 x 08 x 24	594	196	597	17	18	1266
PA-242412-7C	24 x 24 x 12	594	594	297	25	36	1900
PA-242424-7C	24 x 24 x 24	594	594	597	50	61	3800

Please find our most popular sizes above, we do supply many different sizes and grades of carbon filters so please contact us with your requirements.

Wedge HEPA Filters (E10 & H14 to EN1822)

Applications

Wedge HEPA Filters are used in a wide range of applications, such as cleanrooms, and operating theatres.

Other Wedge HEPA Filter applications include research facilities, electronic and micro-electronic industries, nuclear and pharmaceutical industries and where a high level of air quality is required.

Description

The Wedge HEPA filtration medium is provided by microfine glass fibres formed into paper-like surface supplied in various grades depending upon the filtration efficiency required.

Wedge HEPA Filter paper is formed into a close pleated package to provide a large surface area offering maximum airflow at a reasonable resistance.

- Efficiency EN1822: E10 & H14
- Media: Mini pleat fiberglass paper
- Frame: Galvanised steel with ergonomic handle
- Separation: Continuous thermoplastic beads
- Sealant: Polyurethane
- Gasket: Half-round monobloc polyurethane

Technical

- Final Pressure Drop: 600 Pa
- Maximum T° in continuous service: 80°C
- Maximum Humidity: 80% RH



E10 WEDGE HEPA FILTERS					
Actual Sizes mm			Flow Rate	PD	Part Numbers
H	W	D	m ³ /s	Pa	GWEDGE/E10/C
609	609	292	0.89	200	1510820
609	305	292	0.45	200	1510821

H14 WEDGE HEPA FILTERS					
Actual Sizes mm			Flow Rate	PD	Part Numbers
H	W	D	m ³ /s	Pa	WEDGE/H14/C
609	609	292	0.89	280	1510830
609	305	292	0.44	280	1510831

A.V.MOUNT (ANTI VIBRATION MOUNT)



Anti Vibration Mounts (A.V. Mounts) attach to the bottom of Mounting Feet. A.V. Mounts are used to isolate the fan from the system to prevent vibration transfer through fixings or structures. A.V. Mounts can be used to isolate any products from the main system to prevent vibration transfer. The main uses we supply A.V. Mounts for are, Axial flow fans, Box fans, Centrifugal fans, in fact A.V. Mounts can be used with anything that causes vibration.



Flexible Duct Connector

For damping vibration generated by fans or ventilation equipment and transferred to air ducts. For partial compensation of ductworks distortion resulting from temperature changes. Flexible vibration damping connectors are fixed to air ducts with clamps.

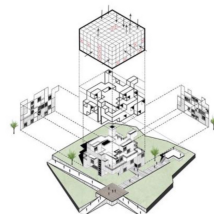


Universal Bracket For Wall Mounting



High Velocity Jet Cowl

High velocity jet cowl. This type of termination provides a higher efflux velocity over standard cowls. In simple terms any residual odours will be "Jetted" high above areas that may be affected by nuisance odours. DEFRA kitchen guidance 2018 actually lists this as a preferred method of extraction. Rainwater is captured in a dish within the cowl and is fed out through a drainage tube.





INVERTER - QUICK INSTALLATION GUIDE

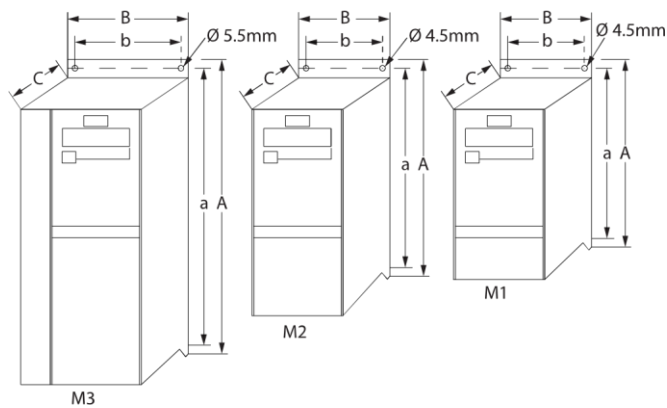


Ready – Steady – Go!
 Connect motor and power cables, turn the control knob,
 and watch the motor speed change.



RoHS compliant
 The VLT® Micro Drive does not contain lead,
 cadmium, hexavalent chrome, mercury,
 or flame retardant PBB and PBDE.

INVERTER - TECHNICAL & DRAWING DETAILS



Part Number	Inverter Model	Enc.	Ph.	V	Amps	kW	Power [kW]	Height [mm] A (incl. conversion kit)	B	Width [mm]	Depth [mm]	Max Weight
							1x200-240 V			b		
PK901092	4.2	M1	1-3	200-240V	4.2	0.75	0.75	219.3	70	55	148	1.1
PK901090	6.8	M2	1-3	200-240V	6.8	1.5	1.5	245.6	78	59	144	1.6
PK901091	9.6	M3	1-3	200-240V	9.6	2.2	2.2	297.5	95	69	210	3

