

Odour Filtration



Project: Rooster Piri Piri Camden

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Version- 0

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1. Extract System Description

➤ **1.1 Extract System – 1.8 m³/s extraction rate**

➤ **1.2 Proposed Filtration**

- 2No. 592x592x100 Pleated Filters
- 6No. 594 x 196 x 597 Site Safe Carbon Filters (Carbon Filter System providing a 0.1s dwell time).

Side access casing measuring 1200 wide x 600 high x 750mm in direction of airflow

➤ **Pleated Filters**

First stage of odour control proposed is pleated filters from Purified Air, these filters will remove 95% of oil and grease particles down to micron level ahead of the carbon filters stage.



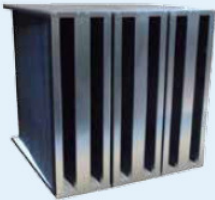
➤ **Carbon Filters**

The next stage of control for EMAQ compliance will be Purified Air Site Safe carbon filters, these innovative carbon units measure 594x196x597mm, three combining to 594x594x597mm, directly replacing our original carbon blocks whilst providing the same filter performance as an existing full-size cell.

Their advantage is that they only weigh 18kg each against the 68kg of our original blocks. This takes the strain out of fitting and servicing, allowing only one engineer to complete the task where two had been previously required.

Proposed Site Safe carbon filters use panels of activated carbon to remove the malodorous gases within the commercial kitchen extract duct through the process of chemical adsorption.

The carbon filters have been sized to achieve a 0.1s dwell time.



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

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

2. Maintenance Programme (Type, Frequency and regime)

To minimize the risk of complaints, it is recommended that:

- Visual inspection of the ventilation system to be carried out at least once a week (metal surfaces should be checked to ensure that there is no accumulation of grease or dirt and there is no surface damage)
- Canopies and grease baffle filters should be cleaned on a daily basis
- Cleaning period for extract duct to TR19 should as follows:

Use	No. hours use per day	Min. Cleaning Interval
Heavy Use	12-16	Every 3 Months
Moderate Use	6-12	Every 6 Months
Light Use	2-6	Annually

- All fans to be maintained on a regular basis as recommended by the fan manufacturer.

3. Recommendations for maintenance the odour control system

Type of filter	Task	Frequency	Work to be carried out
Carbon Site Safe	Replace Carbon Filters	Every 6-12 Months	Replace carbon filters
Fine Filters	Replace fine filters	Every 3 Months	Replace fine filters