Grease, smoke and odour control

Remove grease, smoke and odour from commercial kitchen kitchens where it is not possible to extract to the outside due to planning constraints or where extraction ductwork is not practical or economically viable.

The RECIRC filtration tower makes it possible to filter grease, smoke and odour from commercial kitchen fume and recirculate clean air back into the kitchen.



Three standard units are available capable of handling up 1.0m3/s, 1.5m3/s and 2.0m3/s. The units can be floor mounted as a tower in vertical orientation or duct-mounted horizontally.

RECIRC can only be used with electric cooking applications and it is recommended to install air conditioning to prevent build up of heat in the kitchen area.

There are 6 stages of filtration incorporated within the RECIRC system. These are:

- o Grease bloc filters or Coil Filters in canopy (optional)
- o Mesh prefilters
- o G4 grade panel filter
- o HEPA filter cassette
- o Carbon filter
- o Sitesafe carbon filter

Benefits

- Cost effective
- Provides sensitive primary filtration,
- Increased, multi stage particulate filtration
- Enhanced filtration for cooking applications

Related products



HEPA Filters



Panel Filters



Activated Carbon Sitesafe DCS240824



Introduction to Kitchen Ventilation from Plasma Clean Air

Grease, odour and smoke emissions produced by commercial kitchens are an increasing concern both for existing establishments and for new build projects. Therefore, it is essential to implement a suitable grease and odour control strategy - as a matter of urgency - to ensure that the kitchen emissions comply with DW/172 and DEFRA guidance. This is not just about protecting the environment from nuisance emissions, but also reducing grease build up in the ductwork, which could present a fire risk if left untreated.

Plasma Clean Air's Kitchen Ventilation range consists of a range of modular solutions for grease, smoke and odour control which can be used alone or can be combined to provide a site-specific solution. For example, a pizza restaurant will not require the same level of grease, odour and smoke control equipment as a char-grill steak house.

Starting at the canopy, our <u>Coil Filters</u> are designed to capture 95% of grease particles; between 55-70% more than traditional baffle-type filters. Our <u>Xtract</u> range releases natural ozone - a superb disinfectant and odour neutraliser - directly into kitchen ventilation systems. Our <u>Techniclean</u> range includes the canopy mounted **Techniclean CM**, combining high intensity UVC light with ozone technology to break down odour and grease in the air, as well as the **Techniclean Mini**, **5000** and **7500** models; perfect for new projects or retrofitting into existing ductwork. High levels of grease and smoke particulate are treated by the <u>Electrostatix</u> and combining Electrostatic Precipitation with UVC, are our <u>ESP UV</u> units, provide highly efficient removal of grease, smoke and odour from a compact unit.

For a final polish - removing residual ozone - <u>Activated Carbon</u> filters are the ideal choice for low level extraction. Our Carbon Housing allows Activated Carbon filters to sit in 3, 6 or 9 easily mountable Sitesafe Discarb units.

When it comes to Control Panels, our **Air Flow Interlock** range is used to synchronise the operation of all of our Kitchen Ventilation products with detected air flow. The equipment is automatically turned off when the system is shut down, preventing accidental exposure to UVC light and ozone, whilst ensuring energy efficiency for the system. Options are available for Lamp Life Indicators, Lamp Fault and BMS interface.

Filtration with Activated Carbon from Plasma Clean Air

SiteSafe Reference	SiteSafe Cells Needed	Retrofit Discarb	Suffix
Cooking - General Restaurant	0.1 to 0.2 Seconds	General Purpose Activated Carbon	-7
Cooking - Spicy, Indian	0.2 to 0.4 Seconds	General Purpose Activated Carbon	-7
Reduction of Ozone	0.1 to 0.2 Seconds	General Purpose Activated Carbon	-7

Installation

It is important to achieve uniform distribution of air across the filter surface. Inlet and outlet tapers must be sized correctly and the equipment must be located no less than 1m from any bend. Plasma Clean can offer assistance with the installation design if required. Requires two people plus lifting gear to carry and install.

Accessories

Outer Housing

Maintenance

For the system to continue to operate efficiently the filters will need to be cleaned/ and replaced when they have reached the end of their lifespan. The frequency of cleaning/replacing the filters is dependant on the type of cooking as well as the volume of cooking. A bespoke service package is available. Please enquire.

Warranty

1 year Manufacturer's Warranty (subject to terms and conditions) Extended 3 year Warranty (care plan available)

Terms

In accordance with our standard terms of business.



Technical Specifications & Data



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