

## Commercial Kitchen Ventilation Services

ACK offers a full range of commercial kitchen ventilation services including design and planning, manufacture, installation, maintenance and servicing as well as the supply of replacement parts, with over 30 years experience working for all kinds of restaurant, takeaway and catering business.

- Extraction canopies
- Ventilation ductwork
- Gas interlock systems
- Extractor fans
- Canopy extraction filters
- Carbon cell filter systems
- Make-up air systems
- Heat recovery systems
- Odour control systems
- HSE regulations advice
- Servicing and cleaning
- Site surveys and assessments



### Design & Planning

Our team can provide all of the advice and assistance needed for design and planning stages.



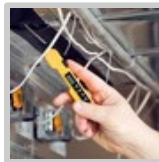
### Installation

Installation services for kitchen ventilation systems, parts and catering equipment..



### Manufacture

Manufacture of custom canopies and filter systems by our skilled engineers at the Bristol factory.



### Maintenance

A range of maintenance and cleaning services for canopies, fans, filters, ductwork and more.

## Ventilation Systems

### Canopies



Canopies remove air impurities, excess heat and grease as a central part of the overall extract system. We design, manufacture and install excellent quality stainless steel canopies including front and back of house overhead, wall mounted and island types made to requirements in line with DW/172 HSE regulations.

### Ductwork



Ductwork moves the extracted air to a safe location usually via an outside wall or roof, it also brings in replacement air back to the kitchen. We provide ductwork services for commercial kitchens including the design, construction, installation as well as various maintenance and cleaning tasks.

### Gas Interlock Systems



G.I.S cut-off gas flow in the event of extraction fan failures. It is now a requirement when installing a new canopy, a new cooker line or layout, also with the fitting of Category 'B' equipment such as ovens, deep fryers etc., and replacements to an existing layout.

## ■ Make-up Air Systems



Regulations require that ventilation systems supply an adequate amount of replacement air as incorrect flueing can lead to the build up of pollutants such as carbon monoxide. We install make-up air input systems to balance efficiently with a kitchen's exhaust system. Other options include wall, window and ceiling fans as well as grilles and vents.

## ■ Heat Recovery Systems



A Heat Recovery Ventilator (HRV) is a self-contained system that balances the air intake and exhausts, delivering filtered, fresh air into your kitchen and extracting stale, moist and dirty air with minimal heat loss, which can also be connected to other rooms by ducting. This provides energy savings benefits by reducing heating requirements while improving air quality and temperature control.

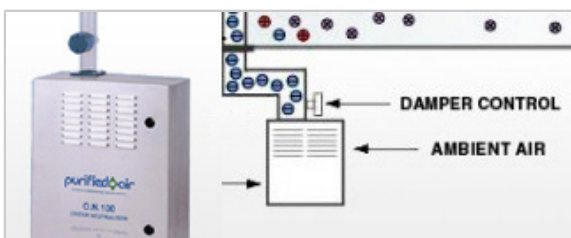
## Odour Control Systems

### ■ Electrostatic Precipitation (ESP) Units



One of the best methods of removing grease and smoke is by electrostatic filters. A highly efficient Electrostatic Precipitator (ESP) range cleans the kitchen extract emissions of both the smoke and grease and can remove particulates down to sub-micron (0.01 micro) size. These systems provide a cleaner environment and will keep your kitchen in line with HSE regulations.

### ■ Odour Control Units



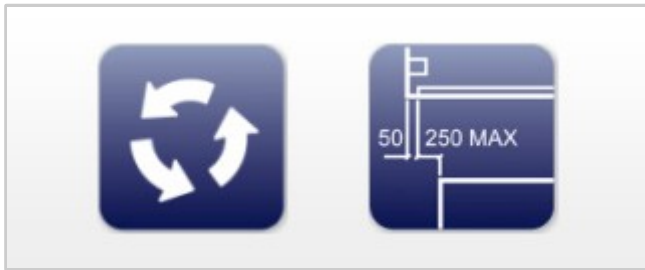
Another effective way to deal with odours is an odour control unit for neutralising odour-laden air from the exhaust ducts of restaurants. Combining easy installation with low maintenance costs the unit uses a combination of a chemical and ionisation to purify the air and get rid of odours from the work environment and surrounding area.

### ■ UV-C Technology



A further option for eliminating odours effectively is UV-C technology which is based on the process of combining ozone and ultra-violet light within a modular system. These lamps act like strong sunlight which works by oxidising odours and grease permanently so destroying and altering the compounds to remove odours.

## HSE Ventilation Regulations



We'll keep you up to date with the latest kitchen ventilation HSE regulation requirements.

Contact us for assistance if you have any enquiries or require advice regarding regulations such as the B&ES DW/172 document, DEFRA guidelines or any other ventilation related specifications.



Examples of more recent HSE requirements.

### *Canopy 'edge to edge overhang'*

The overhang distance from the outside edges of the equipment and the outside edges of the canopy is now required to be 300mm.

### *Ventilation replacement make-up air*

A kitchen ventilation system providing adequate replacement air is not an optional extra any more but a regulatory requirement.

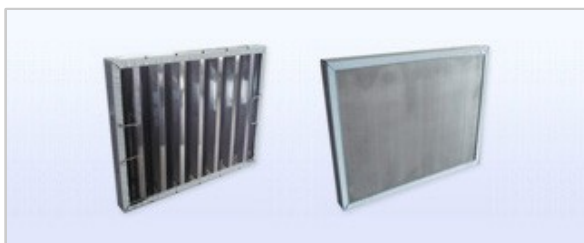
## Fans & Filters

### ■ Extractor Fans



We stock and supply a wide range of kitchen extractor fans and related equipment including plate axial, cased axial, contra-rotating and turbo fan types of various top quality industry brands such as Flakt Woods, Vent Axia, Soler & Palau and Ziehl-Abegg.

### ■ Canopy Filters



Canopy filters reduce the build up of grease around vent ducts and fans in the kitchen extract system. We supply a wide range of replacement filters including stainless steel baffle, flame barrier, steel wire mesh, disposable panel and carbon bag filters.

### ■ Carbon Cell Filter Systems



Our range of carbon cell filter system units are designed for ease of installation and incorporation into ducted air systems. They are used on the supply for purifying incoming air, and also on the extract to remove toxic gasses and odours.

## Commercial Kitchen Canopy Systems

### Introduction



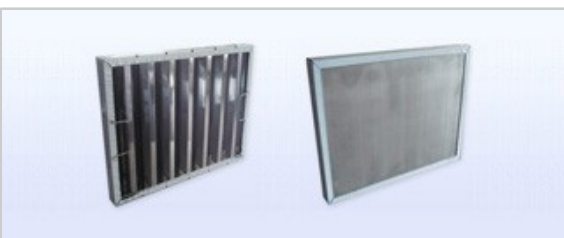
High performance custom canopy extraction systems. Manufactured in England at our Bristol factory. Designed in accordance with all HSE regulations. Full design, manufacture and installation services.

### Design & Construction



Wall or island mounted types to suit the kitchen design. 1.2mm thick, grade 304 satin finish stainless steel. All welded construction. Stainless steel draws for grease collection. Mandatory canopy overhang to the cooking equipment.

### Canopy Grease Filters

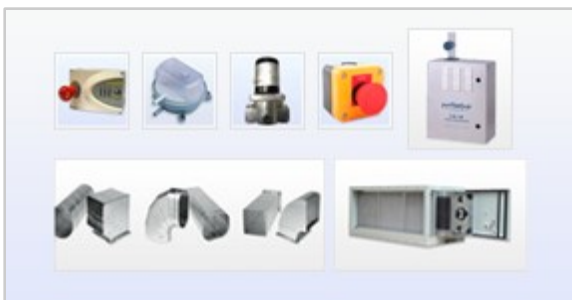


Fitted with heavy duty stainless steel baffle type washable grease filters featuring:

- Rolled section channel frames with safety edges
- Punched holes at bottom for grease drainage
- Pull out bail handles for easy removal

Flame barrier and other types are also available.

### Additional Options



Low energy fitted canopy lighting.

Replacement make-up air and gas interlock system installation (now mandatory for gas equipment).

Various extractor fan, air vent and grille options.

Ventilation ductwork, odour control, carbon cell filter and heat recovery system installation as required.

### HSE Regulations

Designed and manufactured in accordance with:

- HVCA/B&ES DW/172, DW/144, TR19.
- HSE catering information sheet No10.
- British Standards and codes of practice.
- DEFRA odour and noise control guidance.



## Carbon Cell Filter Systems

### Applications

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 also used on the extract to remove toxic gasses and odours.

- Elimination of cooking odours
- General odour removal
- Removal of smoke
- Removal of air pollutants and contaminants

### Construction

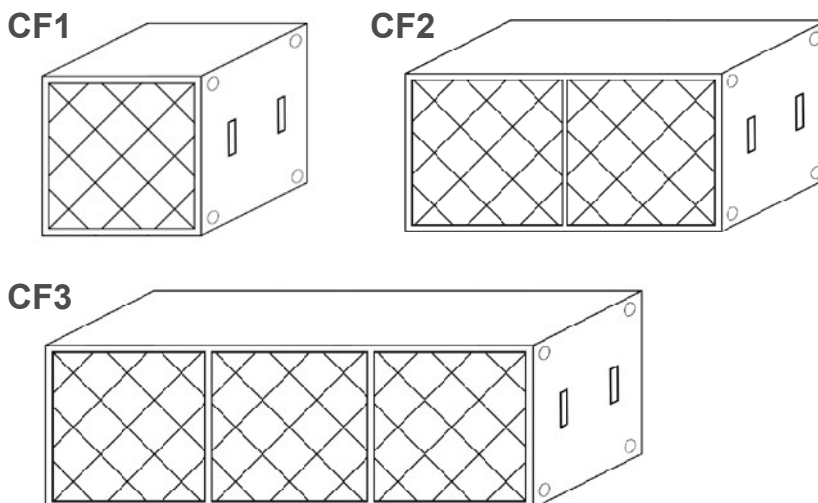
These modules are manufactured by mounting a series on carbon panel filters with a sealed case with the filtering surfaces arranged in a "V" formation. Each carbon panel is sealed into the filter case to ensure no air can bypass the carbon granules. The panels are manufactured using bonding techniques which hold the activated carbon granules together and covered in a carbon impregnated cloth to prevent leakage of granules or powder, remaining intact and rigid even if wet.

### Main Features



- 1 ACK Carbon Cell Extraction System - Model CF2
- 2 Screw fasteners for quick and easy service access
- 3 Multi-layer filtration system with panel and cell filters
- 4 Attached handles for easy pull out and replacement

### Specifications

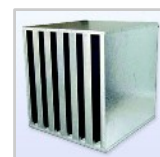


Model	Dimensions (W x D x H)
CF-1	700 x 850 x 660 mm
CF-2	1250 x 850 x 660 mm
CF-3	1850 x 850 x 660 mm



#### Pre-filter

W600 x D100 x H600 mm



#### Carbon Filter Cell

W600 x D600 x H600 mm

### Modules & Filter Grades

Application	Module Capacity	Filter Grade
Normal kitchens and restaurants	0.1 sec dwell time	208
Kitchens & restaurants cooking lots of fried foods	0.2 secs dwell time	208
Kitchens & restaurants using lots of spices, garlic etc.	0.2 – 0.4 secs dwell time	KI