

ACE Carbon Filters type ACD

Ace type **ACD Carbon Filter** or **Discarb Filters** as is commonly called is a completely disposable, self contained unit. These activated bonded carbon filters are designed to deodorize gas pollutants, or put more simply, to remove unpleasant or hazardous odours from the air

Commonly used on commercial kitchen extract systems, their absorption capacity reduces all types of cooking smells, including those produced by fast food outlets, restaurants, coffee bars, and bakeries as well as odours generated by food production factories

Discarb Filters

Discarb Filters can effectively remove and reduce most other common nuisance odours. Their use has expanded considerably in line with environmental awareness, improving indoor air quality for the occupants of buildings located in the vicinity of airports, car parks, sewerage works, factories and waste disposal sites

Establishments with particularly pungent odours, such as spicy Indian cooking or excessive onion or garlic smells will require additional or specialised **Carbon** in order to be effective. Please contact our <u>Filter Sales</u> team for advice

Notes on use and selection of carbon filters

1. As a guide a 25mm nominal thickness **Carbon Panel** should be selected to have a window velocity not exceeding 0.2 m/s if it is to achieve a contact (or dwell) time of approximately 0.1 seconds. This equates to a 600x600x25mm nominal **Carbon Panel** being able to handle about 0.075 m ³/₅ at 0.1 second contact time

2. Where hot air is being filtered, for example extract from a cooker hood, the **Carbon Filters** should be positioned as far from the heat source as possible. Air stream temperatures in excess of 40 $^{\circ}$ should be avoided. If higher temperatures are anticipated, it may be necessary to reduce the air temperature by means of a fresh air bleed, or provision of a cooling coil

3. Humidity should be kept below 80% RH to prevent condensation occurring within the **Carbon**. If this figure is exceeded and condensation takes place, a dramatic increase in resistance will occur

4. Pre-filters must be fitted in the system to prevent contamination of the **Carbon Panel** with particulates. This is in addition to the**Grease Filters** fitted on the cooking extract.

Pre-filtration would normally be provided by a G4 bag as a minimum – Ace Filtration Type AB20. If space is limited, then use of a pre-filter panel type ASPC is recommended

5. Some applications may require a much higher grade of pre-filter. Some cooking operations produce large amounts of smoke, which is detrimental if allowed to reach the carbon filters. In this situation a **HEPA** or electrostatic filter will be required in addition to the pre-filters mentioned above

APPLICATION

AIR VOLUME

Canteens, normal kitchens & restaurants	As rated volume
Kitchens producing large amounts of fried foods or concentrated cooking of burgers	Base on 50% of rated volume
Indian or specialist restaurants (Curry, spices etc)	Base on 33% (or in extreme cases25% of rated volume)
Excess of onions or garlic	Base on 33% (or in extreme cases 25% of rated volume)
General air conditioning	As rated volume
Specialised applications (Chemicals etc) formulae	Refer to Ace Filtration. Obtain concentrations and chemical where possible
Airports (kerosene/petrol fumes)	Base on 66% of rated volume
Museums, art galleries	Refer to Ace Filtration. Special carbon may be equired