

FFAC rechargeable activated carbon filter

Description:

Model FFAC Activated Carbon filters are used in conjunction with ventilation and air conditioning systems for the removal of undesirable gases and vapors (odours etc.) from the air stream by a process called “adsorption”.

FFAC filters are manufactured using high activity carbons for use in general air treatment applications, including commercial kitchens and industrial installations. The activated carbon used in FFAC filters is manufactured from specific grades of coconut shell, which produces high quality carbon that can meet the demands of general air treatment.

Compounds and odours which are adsorbed with standard carbon include; acetic acid, adhesives, animal odours, asphalt fumes, antiseptics, bathroom smells, body odour, cheese, cigarette smoke odour, diesel fumes, detergents, fish odours, fuel, hospital odours, kitchen odours, methyl ethylene ketone, ozone, paint odours, perfumes and varnish fumes. For a more complete list of compounds contact Filterfit. A range of impregnated carbons, designed for removal of specific fumes, is also available to suit various applications.

FFAC carbon filters consist of an outer frame manufactured from galvanised steel which is fitted with up to 12 individual galvanised steel framed panels, installed in a V configuration. Each individual panel contains carbon granules between two pieces of perforated metal, incorporating fine aluminium mesh to prevent any carbon dust carry over. The carbon is packed into the individual panels using vibration, to ensure there is no settling of the carbon in transit which may cause air by pass.

FFAC carbon filters are installed by permanently fixing the outer frame into the ductwork ensuring that there is sufficient support for the filters weight (see specifications). By fixing frames together, any number of filters can be installed to make up a filter bank to handle the



required air quantity, however supports will be required to support the weight of the carbon filters. As the inner cells can be removed from one side of the filter only, it is critical that access is available to that side for servicing.

The activated carbon filters are not designed to remove particulate, conventional particulate and/or grease filters should be installed on the dirty air side of the carbon filters to prevent dust or grease from blinding the carbon filter which would severely effect its performance.

The activated carbon used in the FFAC carbon filters will adsorb large amounts of odours before its efficiency to adsorb decreases. When efficiency of the carbon decreases, the carbon can be easily replaced by removing the individual panels from the filter and replacing the carbon with new activated carbon which has equal performance to the carbon initially supplied.

The new carbon should be installed into the panels ensuring there is no possibility of the carbon settling and allowing air by pass. Complete replacement panels are also available which are sealed so that there is no risk of their performance deteriorating whilst they are in storage.

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Performance data:

Specifications	FFAC666	FFAC636
Outer frame dimension (mm)	610 x 610 x 590	610 x 305 x 590
Rated capacity	944 l/sec	565 l/sec
Clean resistance	110 Pa	60 Pa
Weight of carbon	41 kg	21 kg
Total weight	100 kg	60 kg
Maximum operating temperature	52 ^C	52 ^C

Note: Sizes are standard sizes - custom sizes are available on request

Performance data for Envirocarb 208AC activated carbon:

CTC adsorption (% w/w)	60 - 70
Surface area (m ² g ⁻¹)	1150 - 1350
Bulk density (g cm ⁻³)	0.47 - 0.51
Loose-filled density (g cm ⁻³)	0.44-0.48
Moisture content (% w/w)	< 5
Hardness %	95 - 99
PH	9 - 11