

## Activated Carbon Filters

### Applications

- Odour removal through Adsorption
- Highly effective on organic odours
- Minimal contact times required
- Disposable
- Effective Ozone Removal

### Construction

Three constructions of activated carbon filters are available as follows.

**Discarbs** - These filters have the highest carbon loading in our range, with carbon panels permanently sealed into a gavanised steel frame. These are capable of handling large air volumes, with no possibility of air leakage.

**Bonded Carbon Panel** - An aluminium frame surrounds the carbon panel, to create a manageable panel for installation where access is limited. Multiple panels need to be used to create the required contact times.

**Loose Fill Carbon Panel** - These galvanized steel panels constructed from expanded mesh are filled with pellets of activated carbon to offer a lower pressure differential, compared to bonded carbon panels. These can also allow the use of impregnated carbon for specific nuisance odours.

### Technical

Activated Carbon Filters must be protected from contact with particulates, such as grease and smoke, and it is recommended that the air is filtered to a minimum grade of F5 to EN779, before passing through the Carbon. This can be achieved with an Airclean General Purpose Bag Filter.

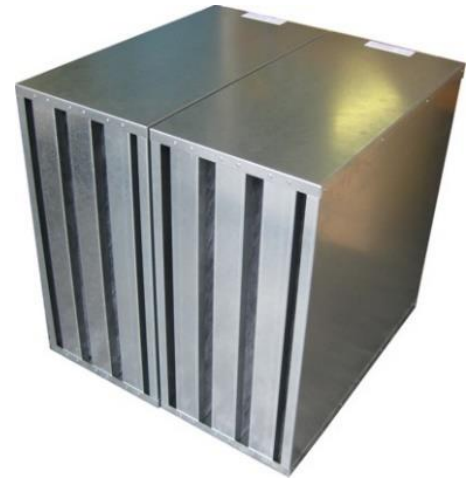
To ensure effective removal of odours, guidelines must be followed depending upon the type of cuisine that is being cooked. These guidelines are often advised by Environmental Health and therefore must be adhered to, but Airclean usually work on the following basis :-

**0.1 Seconds Contact Time - Suitable for most odour removal in English and Chinese cuisine (Light Odours)**

**0.3 Seconds Contact Time - Suitable for Indian and Thai cuisine (Heavy Odours)**

For Specific odour removal, please refer to our "Guide to Gaseous Adsorption" (Catalogue AC6/1b , Section 6), or contact our technical team.

Activated Carbon Filters will not operate effectively in temperatures above 40 Degrees Centigrade, or above 80% Room Humidity.



## ACTIVATED CARBON DISCARB FILTERS - STANDARD DUTY

Dimensions - (Actual, mm)			m <sup>3</sup> /s	Pa	Grade 20 Standard Duty	Grade 50 Standard Duty
H	W	D			Part Numbers	Part Numbers
293	293	293	0.1	75	1620101	1620121
293	293	445	0.15	95	1620102	1620122
293	293	597	0.22	140	1620103	1620123
445	445	293	0.21	55	1620104	1620124
445	445	445	0.31	70	1620105	1620125
445	445	597	0.41	105	1620106	1620126
597	597	293	0.41	70	1620107	1620127
597	597	445	0.61	90	1620108	1620128
597	597	597	0.81	130	1620109	1620129
597	293	597	0.4	130	1620110	1620130
597	196	597	0.27	130	1620111	1620131

## ACTIVATED CARBON DISCARB FILTERS - EXTRA DUTY

Dimensions (Actual, mm)			m <sup>3</sup> /s	Pa	Grade 20 Extra Duty	Grade 50 Extra Duty
H	W	D			Part Numbers	Part Numbers
293	293	293	0.13	125	1620201	1620221
293	293	445	0.2	175	1620202	1620222
293	293	597	0.27	250	1620203	1620223
445	445	293	0.3	95	1620204	1620224
445	445	445	0.41	125	1620205	1620225
445	445	597	0.54	185	1620206	1620226
597	597	293	0.54	125	1620207	1620227
597	597	445	0.8	150	1620208	1620228
597	597	597	1.06	225	1620209	1620229
597	293	597	0.53	225	1620210	1620230
597	196	597	0.35	225	1620211	1620231

### Notes

- \* Airflow rates are based on a 0.1 second contact time. (Indian & Thai Cuisine require minimum of 0.3s)
- \* **Grade 20** 20 - 30% retention CTC. **Grade 50** 50 - 60% retention CTC.

### Holding Frames and Cases

Holding frames and casings for Activated Carbon Filters are available singularly or in multiples, and can be manufactured to suit non-standard sizes and special applications.

See Catalogue Section 8 (AC8) and Section 3 or 11 (code AC3.9 for full information).



AHU Style Side Withdrawal Housing for Bonded and Loose Fill Panels (1908)



Kitchavent – Grease, Smoke and Odour Control for Kitchen Extract (1815)