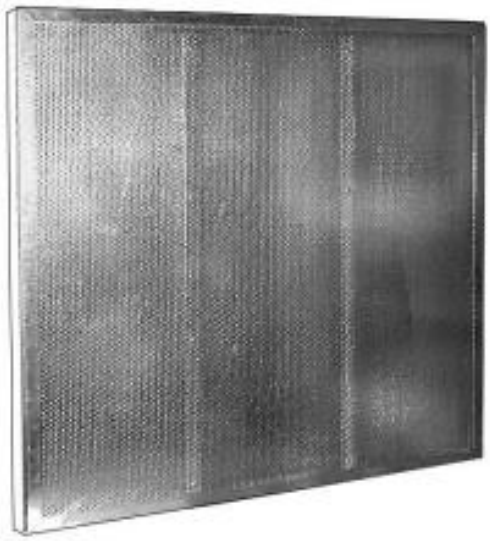
PRODUCT DATA SHEET

LOOSEFILL CARBON PANEL

Carbon filtration is ideal for removing unpleasant or even dangerous odours and gases from a wide variety of sources. Carbon will adsorb chemical molecules in the airstream in varying degrees according to the type of contaminant and the period of time the air remains resident in the carbon.

Typical applications for carbon include: Incoming air in industrial plants; Airports; Art galleries and Museums; Kitchen extract odour control; Industrial processes - sewage plants etc.; Office and Residential air supply.

OPERATIONAL CRITERIA



In order to ensure a carbon filter operates satisfactorily, certain criteria need to be met which do not apply to particulate filters. The most important aspect is the "dwell time" (the period of time the air is in contact with the carbon). The minimum dwell time used is 0.1 seconds but may vary considerably according to the contaminant to be removed.

As far as possible, water vapour should be eradicated from the air-stream to eliminate condensation within the filter that could cause porous blockage and an increase in resistance. However, humidity levels as high as 80% RH are normally acceptable providing no interstitial condensation takes place.

Air-stream temperatures entering the filter in excess of 40°C should be avoided. Where temperatures above this level are anticipated, steps should be taken to reduce the temperature to an acceptable level by fresh air bleed, cooling coil or heat exchanger. In catering and food preparation applications, smoke and grease must be removed from the air-stream prior to entry into the carbon filter.

PERFORMANCE

Due to the complex nature of adsorption, carbon filters are generally designed to suit the application, however, the following information is given as an indication of the physical requirements for its use. An extensive range of standard sizes are available - some of the more common ones are shown below. Non-standard sizes are available to order on request.

Loosefill Panel Size (mm)	Carbon Weight (Kg)	Capacity at 0.1 second dwell time (m^3/hr)
295x595x25	1.97	145
495x595x25	3.32	244
595x595x25	4	293
295x595x50	4.11	303
495x595x50	6.94	508
595x595x50	8.35	612
295x595x100	8.38	619
495x595x100	14.17	1039
595x595x100	17.06	1249

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