

FiltaCarb™ **vent cube series** vapour phase activated carbon filtration systems



FiltaCarb™ FCC150 cube series filter built for Hunter Water Corporation – Corlette W.W.P.S. (Waste Water Pump Station)

About FiltaCarb™ carbon filter technology

FiltaCarb™ vapour phase activated carbon systems provide an efficient and economical means to reduce V.O.C. (Volatile Organic Compound) concentrations, corrosive gases including Hydrogen Sulphide (H₂S) and toxic vapours to control odours. They provide immediate adsorption upon contact with the gases. All of the systems have a specified contact time to ensure they meet optimum performance throughout the life of the media. The filter vessels are filled with a specific granular activated carbon, which is suitable for a variety of odour abatement applications.

The FiltaCarb™ vent cube offers a simple and secure solution for fugitive odours from pump stations. The system can be mounted directly above a penetration into the wet well or mounted locally and ducted to the system. The system is supplied complete with extraction fan and sound attenuator. The vent cube is robust construction with high durability, UV and corrosion resistance.

Suitable for wastewater pump stations, rising mains and manholes. It is also suitable for other industrial emission applications where specific filtration media can be applied to treat the target emissions.

All FiltaCarb™ vent cube models have incorporated into their design a fats and greases pre-filter to maintain constant air pressure and increase the life of the carbon media. This pre-filter also makes the system easier to maintain as it can be cleaned as often as necessary.

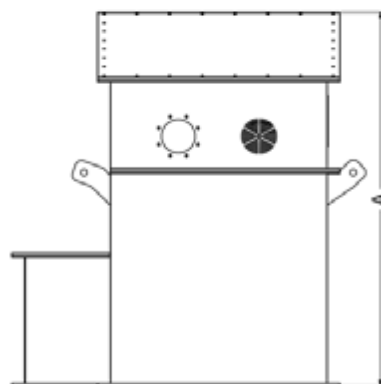
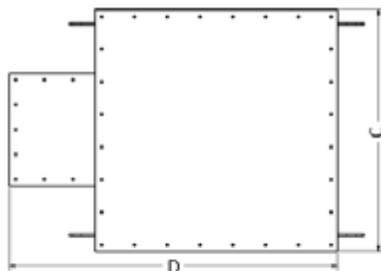
Unlike passive filters and vents, the forced extraction of the FiltaCarb™ vent cube provides a controlled rate of extraction. This enables better operational management of the fugitive and potentially corrosive gases.

Benefits of FiltaCarb™ vent cube filters:

- More than 99.5% of H₂S removed
- Comes complete with fan and flow control dampener
- Quick and simple installation
- Only requires power
- Effective treatment to remove a variety of organic contaminants and odour-causing emissions
- Continuous treatment at varying flow rates and concentrations
- Low pressure drops across the filter bed
- Flexibility to be installed in series or multiple units in parallel
- Low cost per unit makes carbon treatment economical
- Designed for the rigors of wastewater treatment



FiltaCarb™ FCC200F cube series filter



Functional Description	The FiltaCarb™ system is a single-stage treatment using carbon adsorption technology. A fan on the exhaust side of the vessel creates negative pressure to ensure air flow across the system. Hazardous gases in the incoming air move through a pre-filter to capture fats and greases and then move through the filter media. The untreated gases accumulate in the lower plenum of the filter before being evenly diffused through the media of the filter bed where contaminants are physically adsorbed. A specific activated carbon media is used to treat the target gases to achieve more than 99.5% removal of source gases.
Construction	FiltaCarb™ vent cube activated carbon filter is designed to reduce logistic and installation costs. The system is preloaded with media and is factory tested prior to dispatch. The filter vessel as well as any other associated components (including extraction fan and sound attenuator) are mounted within a single assembly. The FiltaCarb™ cube vent filter is constructed from UV corrosion resistant P.V.C. (Poly Vinyl Chloride), Optional: High Density Polyethylene (H.D.P.E).
Adsorptive Media	Utilises a specifically designed activated carbon for use in odour control systems where the primary cause of odour is as a result of the presence of mercaptans, Hydrogen Sulphide (H ₂ S), and volatile organic compounds (V.O.C.'s). Customised media blends and mixtures can be supplied to meet any needs that fall outside the capacities of our standard activated carbon materials.
Optional Items	An electrical control panel, which can be mounted to the skid for local control, with manual ON/OFF/AUTO switch operation and indicator lights to show operational status. Control panel – powder coated steel - IP65 rated or optional stainless steel - IP65 rated. Break-through gas indicators

Cube Series	Model	Capacity		Empty Bed Residence Time (EBRT) (sec)	Vessel Size		System Heights (m)	Media Volume (m3)	Media Depth (m)	Media Mass GAC (kg)	System Mass			Duct Size (mm) ID	Pressure Drops Vessel (Pa)	Fan Details	
		L / s	m ³ / hr.		Vessel (kg)	Misc. (kg)					Total (kg)	Model	Motor Size (KW)				
FiltaCarb	FCC150	150	540	3	1.00	1.30	1.69	0.45	0.57	252	78	30	360	154	341	Seat 20	1.10
	FCC200	200	540	3	1.14	1.55	1.77	0.60	0.60	336	198	30	564	154	577	Seat 20	1.10