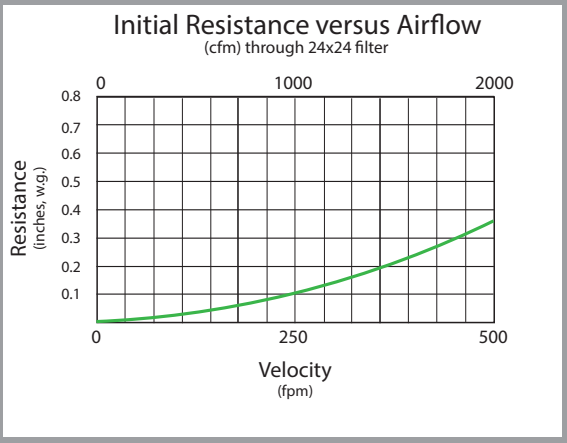
CamCarb VC

Cost effective filter for control of odors and outdoor pollution



Data for 24" by 24" configuration

The CamCarb VC loose-fill V-Cell panel cartridge filter with header is recommended for reduction of modest occupancy odor loads, peak-shaving* of ambient air pollutants, and continuous control of low-level gaseous contaminants in make-up and air recirculation applications.

The CamCarb VC may be installed in any HVAC application where the use of outside air for contaminant dilution is burdensome and cost prohibitive to the building operator. Use of the CamCarb VC loose-fill v-cell cartridge for contaminant adsorption and removal allows for minimal introduction and conditioning of outside air, thereby significantly reducing energy costs associated with heating and cooling of required make-up air where a molecular filter is not applied. This method for contaminant removal is specifically prescribed in the ASHRAE Standard 62, Ventilation for Acceptable Indoor Air Quality.

Each CamCarb VC Loose-Fill V-Cell Cartridge features:

- Lightweight and compact honeycomb panels containing the molecular media, mounted in a plastic frame for easy installation and disposal
- Nominal 1-inch mounting header
- Low resistance to airflow (nominal 0.38" w.g. at 500 fpm).

To maximize molecular lifetime, install a minimum MERV 13 efficiency particulate filter upstream of the cartridge (to control carbon dusting, install a second particulate filter downstream).

CamCarb VC Loose-Fill V-Cell cartridges may be installed in front-access built-up filter banks, or in two-stage side-access housings with a minimum 12 inch depth.

Available with activated or impregnated carbon, potassium permanganate or blends.

Specialized medias are available. Consult the factory.

* Peak-shaving describes the reduction of airborne molecular contaminants during high or intermittent periods of contaminant generation to concentrations below human sensory detection, or industry/government defined thresholds.

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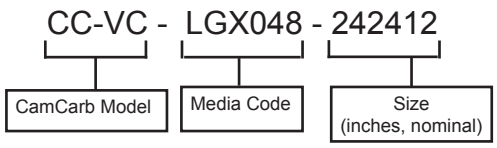
Performance Data

CamCarb VC Model	Actual Size	Bed Thickness (inches)	Airflow Capacity (500 cfm)	Resistance @ Capacity (inches w.g.)
242412	23.38 x 23.38 x 11.50	1.0	2000	0.38
242012	23.38 x 19.38 x 11.50		1667	
241212	23.38 x 11.38 x 11.50		1000	

Minimum residence time of 0.026 seconds at 500 fpm (airflow capacity).

Model Designators



Media Name	Media Code	Description	Typical Applications
LGX048	LGX048	Granular activated carbon	New construction odors, VOCs, tobacco, ozone
CEX004	CEX004	Pelletized activated carbon	New construction odors, VOCs, tobacco, ozone
CEX004A3	CEX004A3	Pelletized activated carbon impregnated to target a range of acidic gases	Pulp & paper, sewerage treatment facilities, manufacturing & chemical processing
CamPure 4, 8, 9	CP4, CP8, CP9	Activated alumina impregnated with potassium permanganate	Indoor air quality, low molecular weight hydrocarbons, oxidizable acid gases
CamPure 44, 84, 94	CP44, CP84, CP94	CamPure media blended with pelletized activated carbon	Airports, pharmaceutical make-up air, funeral & nursing homes, animal care facilities, make-up air
CamPure 10	CP10	Activated alumina impregnated with sodium permanganate	Pulp & paper, sewerage treatment facilities, manufacturing & chemical processing, and acidic sulfur gases
CamPure 15	CP15	Activated alumina and activated carbon powders impregnated to target a range of acidic gases	Pulp & paper, sewerage treatment facilities, manufacturing & chemical processing, and acidic sulfur gases
Other media available. Contact factory for details.			

DATA NOTES:
Maximum continuous operating temperature is 100° F (38° C). Maximum continuous relative humidity level should not exceed 75%.
Optimum operating levels are the same as human comfort 72° F (23° C) and 50% relative humidity.

Specification

1.0 General

1.1 - Air filters shall be compact 12 inch deep adsorber type with multiple panels of 1-inch deep molecular media, impact-resistant plastic end caps, galvanized steel vertical support channels, and a 1-inch nominal size header for side-access or built-up bank application.

1.2 - Sizes shall be as noted on drawings or other supporting materials.

2.0 Construction

2.1 - Media shall be molecular type specifically manufactured for the removal of molecular contaminants. The media shall be formed in one-inch panels, enclosed in 26-gauge galvanized steel frame and supported and protected by a combination of corrugated Kraft honeycomb and nylon mesh.

2.2 - The media packs shall be formed into a V-cell configuration with an appropriate number of panels to meet pressure drop requirements. The panels shall be secured in impact-resistant plastic enclosure caps.

2.3 - Galvanized steel channel supports shall be installed on the vertical axis on the air-entering and the air-exiting sides to effect a rigid and durable enclosure.

3.0 Performance

3.1 - Resistance to airflow shall not exceed 0.38 inches w.g. at 500 feet per minute velocity.

3.2 - Media volume shall be appropriate to provide a minimum residence time of 0.026 seconds when operated at a velocity of 500 feet per minute.

3.3 - Manufacturer shall provide evidence of facility certification to ISO 9001:2008.

Filters shall be Camfil CamCarb VC Loose-fill V-Cell Cartridges or equal.

4.0 Performance Testing

4.1 - Manufacturer shall provide results of efficiency testing against nitrogen dioxide, ozone, and toluene.

4.2 - Test to be conducted on full size complete filters when challenged with typical ambient concentrations, i.e. 1 to 5 ppm at 2,000 cfm.

4.3 - Gas detectors must have lower level of detection (LLoD) values <1 ppb.

4.4 - Filters to be tested by the manufacturer using a protocol in accordance with ASHRAE 145.2. Full details of test protocol to be included with photographic evidence.

For detailed specifications please consult your local Camfil Distributor, Representative, or www.camfil.com. Camfil has a policy of uninterrupted research, development and product improvement. We reserve the right to change designs and specifications without notice.

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