



A combination or “2 in 1” filter providing both particle and molecular filtration in a compact filter configuration. CityCarb is a group of solutions to address the problems of atmospheric chemical burden and odors in buildings. It is especially useful when; due to lack of space, molecular filtration must be combined with particle filtration in a single stage of filtration.

The filters are constructed from two distinct layers of pleated media that are formed into panels and held in a robust injection molded frame. They are designed to fit in place of existing 300mm (12”) deep filters within an air-handling unit. The filters are readily mounted in standard ventilation system frames without the need for modification, so upgrading bag or compact filters is a simple process. Each filter has a jointless gasket on the header frame to ensure an effective leak-free installation.

Rapid Adsorption Dynamics Carbon

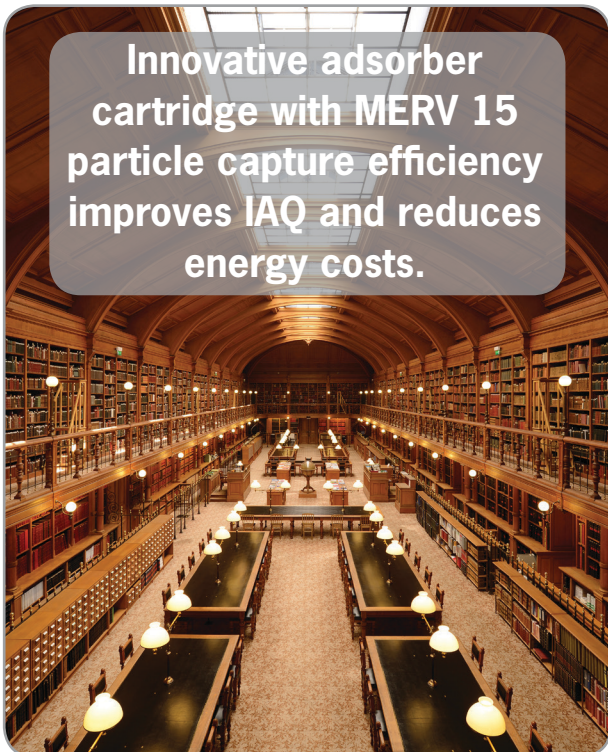
The CityCarb CH model uses a targeted media to specifically control organic acids. The carbon operates with a Rapid Adsorption Dynamics (RAD) mechanism and includes a reactive impregnate that is specifically designed to enhance performance against low molecular weight organic acids, that may be present in certain cultural heritage buildings.

The CityCarb CH is specifically intended for use in the recirculation air systems of museums, art galleries, libraries and archives. Its specific function is to control the internal source pollutants; formic (methanoic) and acetic (ethanoic) acids which are generated through the degradation of cellulose based materials (paper and wood). If left untreated, these organic acids can cause irreversible damage to other cultural heritage collection artifacts. It is recommended to combine with CityCarb I installed in the make-up air system to provide control of external source pollutants, ozone, nitrogen dioxide, sulfur dioxide, and VOCs.

About outgassing

It is a logical requirement that the performance of molecular filters is not compromised by outgassing from the materials used in the filter construction. On a weight basis, the principal raw materials used in filter construction include; the filter media, plastic frames, adhesives, and sealants. Camfil selected and tested the materials used in all CityCarb filters to ensure low outgassing characteristics. The total outgassing level is less than 4 micrograms/cm².

Outgassing is determined by heating to 50°C and measuring the concentrations of the most prevalent gases released from the material. Note, the outgassing test is conducted at approximately double the normal operational temperature for air filters. Many competitive products may use more economic raw materials that will have significantly higher outgassing values.



Performance Data

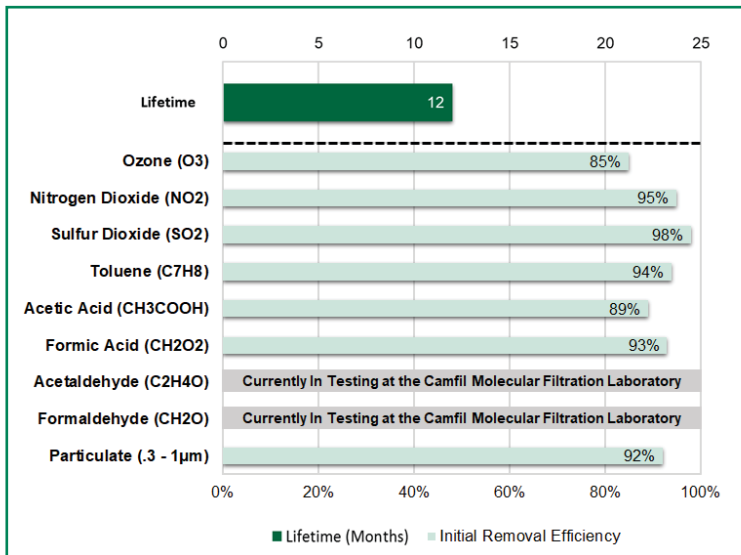
Model Designator Part Number	Rated Airflow (cfm)	Nominal Size (inches)	Media Area (ft ²)	MERV / Ozone Ratings	Initial Resistance (inches, w.g.)	Weight (lbs)
CIZP-7C-242412-4V-21-00 M20000072	2000	24x24x12	80.4	MERV 15 MERV13A	0.52	21
CIZP-7C-202412-4V-21-00 M20000073	1650	20x24x12	67.0	Oz 8 (>80% Ozone removal efficiency)		15
CIZP-7C-122412-4V-21-00 M20000074	1000	12x24x12	40.2			11

Product Notes:

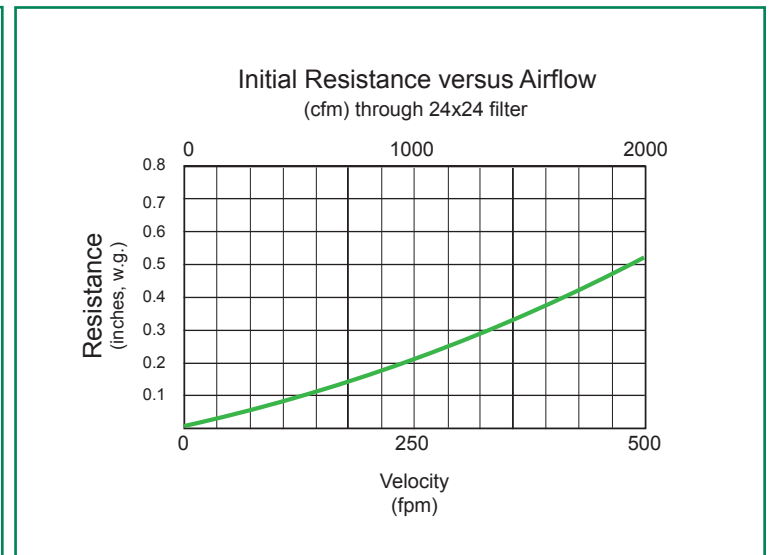
- MERV, Minimum Efficiency Reporting Value per ASHRAE Filter Testing Standard 52.2.
- Maximum operating temperature 104° F (40° C).
- 70% RH maximum for optimum adsorption. Schedule air filters for change when initial pressure drop has doubled.
- Final pressure drop should not exceed 1.50" w.g.

For detailed specifications or drawing, please consult your local Camfil Distributor or Representative or download from the Molecular Toolbox located in the **Segments Tab of CamTab File Archive** at www.camfil.us. Camfil has a policy of uninterrupted research, development and product improvement. We reserve the right to change designs and specifications without notice. For assistance specific to this product please contact Camfil's Washington, NC facility at Sales-WA@camfil.com or telephone at (877) 658-6588.

Lifetime and Initial Removal Efficiencies*



Pressure Drop



Applicable Industries

Sector	Definition	Industry Examples
Advanced IAQ	Advanced IAQ refers to a specific application where the primary concern is the impact air quality has on the equipment and/or processes within a space, while still considering the health and comfort of the building occupants.	Cultural Heritage, Food & Beverage, Laboratory Space, Wastewater Treatment, Data Centers

* This lifetime estimate is based on typical operating conditions in the appropriate application. The actual lifetime for your application can vary drastically depending on concentration of gases, flow rate, temperature, and/or relative humidity. Camfil's unique molecular filtration testing laboratory runs tests according to the following standards: ASHRAE 145.1, ASHRAE 145.2, ISO 10121-1 and ISO 10121-2. The initial removal efficiencies referenced in the chart above were determined by challenging full size (24" x 24") filters with realistic gas concentrations in 2,000 CFM of air at 50% RH and 72F. More information on this unique testing facility can be provided.