CityCarb E

Particulate and Molecular Filtration

- **Safe, light, clean and easy to handle. Low resistance to airflow.**
- **Performance tested for particles, ozone and toluene.**
- **Ozone efficiency and Camfil rating.**
- **Includes Camfil's exclusive RAD carbon.**
- **EN779:2012 M6 rating and ASHRAE 52.2 MERV 13 rating.**

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 problem of atmospheric chemical burden and odours in building. It is especially useful when; due to lack of space, molecular filtration must be combined with particle filtration in a single device.

The filters are constructed from 2 distinct layers of pleated media that are formed into panels and held in a robust plastic 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 E model uses broad spectrum carbon and will adsorb more than 99.5% of the thousands of different molecules that might be expected in the indoor environment of a city-centre building. The broad spectrum carbon operates with Rapid Adsorption Dynamics and is specifically designed to be highly efficient against the multiple contaminants present on an individual basis in low or moderate concentrations in city-centre buildings. It is intended for primary use in recirculation air systems in buildings where there is a need to provide enhanced air quality. However it is also suitable for use in make-up air systems. It will provide protection against external and internal source pollutants.

Indoor sources of chemical contamination include wooden furniture, carpets, photocopiers, cleaning materials, new paint, wood finishes, padded furniture, dry cleaned clothes and human occupants. The majority of external atmospheric pollution arises from vehicle emissions, power generation and industry. These are the sources for irritant gases that represent a known threat to human health including ozone, nitrogen dioxide, sulphur dioxide, volatile organic compounds (VOCs) and poly-aromatic hydrocarbons (PAHs).

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 have selected and tested the materials used in all CityCarb filters (E, I and CH versions) to have extremely low outgassing characteristics. The total outgassing level is less than 4 micrograms/cm^2.

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.

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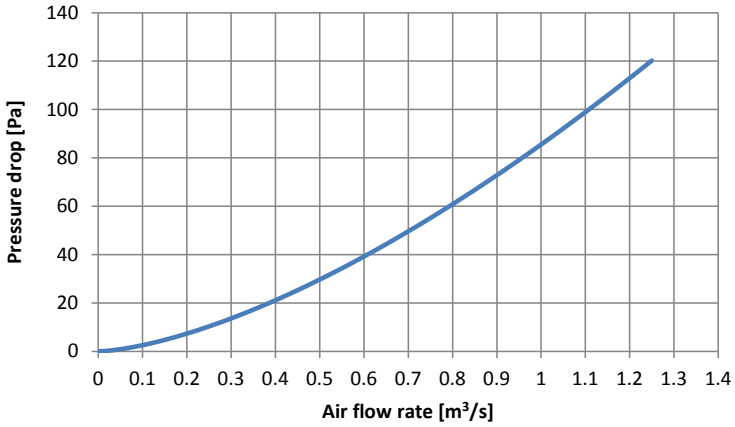
Pressure drop



Performance Data

Width	Height	Depth	Filter class EN 779:2012 / MERV[1]	Air flow m³/hr	Pressure drop Pa	Media area m²	Weight kg	Energy class
592	592	292	M6 / MERV 13	3400	80	7.45	8.25	E
592	490	292	M6 / MERV 13	2800	80	6.2	6	E
592	287	292	M6 / MERV 13	1500	80	3.6	4.3	E

Data Notes:
[1] MERV, Minimum Efficiency Reporting Value per ASHRAE Filter Testing Standard 52.2