

Are Indoor Air Pollutants and Allergens in Your Home Affecting Your Family's Health and Comfort?



Breathe easier with
CAP® 'Whole House'
Medical Grade HEPA
Filtration Systems



CAP® 600 & CAP1200 Series Central Air Purifiers



Common Indoor Air Pollutants Include:

- ❑ *Mold & Fungal Spores*
- ❑ *Bacteria*
- ❑ *Dust Mites*
- ❑ *Pollens*
- ❑ *Pet Hair & Dander*
- ❑ *Tobacco Smoke*

A typical home has billions of microscopic particles floating in the air, including allergens that can trigger adverse reactions such as persistent headache, runny nose, sinusitis (sinus inflammation), itchy, watery eyes, sore or raspy throat, and chronic fatigue in family members who suffer from allergies, asthma and other respiratory ailments. In fact, a U.S. EPA study on indoor air quality found that our exposure to some pollutants and allergens can be up to 70 times higher than outdoors. A Mayo Clinic study found that reactions to toxins in fungal spores (molds) accounted for 96% of chronic sinusitis cases they reviewed.

Allergen Avoidance: An Ounce of Prevention...

Physicians today recommend taking preventive steps to reduce exposure of sensitive individuals to respiratory allergens. This common sense technique, known as 'allergen avoidance', is analogous to people with food allergies avoiding eating those foods.

"When feasible, (allergen) avoidance is the preferred form of allergy treatment, since it both relieves symptoms and eradicates the cause of the difficulty."

- Journal of the American Medical Association

"The most effective form of recurrent inhalant allergy is the removal of allergens to which the patient is sensitive."

- Advances in Pediatrics

HVAC Systems and IAQ

The dark, damp confines of HVAC ductwork and components such as the evaporator coil and drain pan can provide perfect breeding grounds for mold, mildew and bacteria growth when they become contaminated with dirt particles that pass through the furnace filter. Whenever the HVAC fan runs harmful fungal spores can then spew into the living space of a home.

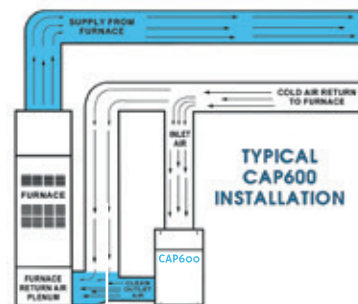


Whole House HEPA Protection

Because HEPA (High Efficiency Particulate Air) filters are the most effective small-particle filters available, with media filtration-efficiency of 99.97% or higher against 0.3-micron particles. That's why they are used to provide critical air cleaning in areas such as hospital operating rooms, nuclear facilities, and pharmaceutical and electronics manufacturing. Now true HEPA technology is available for your home.

'Partial Bypass' Installation

CAP600 and 1200 series systems are designed for professional installation into the HVAC air return duct near the air handler, in an out of the way location such as a basement, crawl space or attic. A 'partial bypass' installation configuration enables the device to purify about 50% of the return-air during each pass through the HVAC system. Typically, the entire air volume within the living space of a home can be HEPA filtered 50 to 75 times per day.



: A Whole House Solution To Indoor Air Pollution

CAP600 & CAP1200 Series Models

All five CAP whole-house HEPA models are equipped with an efficient, internal motor and blower assembly, to maintain proper HVAC system airflow levels. CAP600 series models are typically used in HVAC systems with up to 3.5 tons of capacity; CAP1200 series units can handle systems as large as 5 tons. Your authorized CAP dealer can help you select the most appropriate model for your home.

CAP600EC Base Model

The economical CAP600EC model features three stages of filtration: an inexpensive, 1"-deep disposable filter to capture large, visible particles; a 2"-deep, dual layer VAPOR-LOCK® carbon filter to remove unpleasant odors and smaller particles; and, HEPA media for capturing microscopic particles and pathogens such as fungal spores.



CAP600-UV & CAP1200-UV Models:

HEPA & Germicidal UV Disinfection

The CAP600-UV and CAP1200-UV feature the same germicidal UV (UVGI) lamp technology hospitals use to control infectious pathogens to irradiate microbes in the air stream with a high dose of UVGI energy during each pass through the HVAC system.

The CAP600-UV also features a 1"-deep large particle pre-filter, a 2" VAPOR-LOCK carbon intermediate filter, and a 99.97% HEPA filter. The larger CAP1200-UV model, has about 50% more air filtration capacity. It features an additional 2"-deep particle pre-filter, a heavier duty VAPOR-LOCK carbon filter, and a higher capacity HEPA filter, for added dirt holding and odor removal capacity.



CAP600-UVP & CAP1200UVP Models: 'UV Plus' Technology

The unique UV Plus dual-frequency lamp in the CAP600-UVP and CAP1200UVP models is designed specifically for homes plagued with moisture-related mold growth and odor problems or heavy smokers. They are equipped with the same particulate and carbon filters as the CAP600-UV and CAP1200-UV models. In addition to germicidal UV, the UV Plus lamp uses a photolysis oxidation process to produce a controlled amount of highly reactive ozone gas, enhancing its ability to destroy fungal spores and unpleasant odors. The ozone gas breaks down quickly within the HVAC ductwork as it reacts with odor-causing compounds, so ozone levels in the occupied living space are not elevated.



Multiple HVAC Systems

Larger homes with two or more central HVAC systems require a separate CAP600 series or CAP1200 series Central Air Purifier for each system.

Safety First

All CAP600 series and CAP1200 series models are certified by Environmental Testing Laboratories to conform to applicable UL and CSA standards for electrical safety and ozone levels.



Frequently Asked Questions

Q: Why did Abatement Technologies decide to use HEPA filters in the CAP600 and CAP1200 series models?

A: According to the EPA: “Of primary concern from a health standpoint are invisible, respirable particles, which have a higher probability of penetrating deep into the lung and causing acute or chronic effects.” The ability of HEPA filter media to capture at least 9,997 out of every 10,000 0.3 micron particles makes them far superior to other types of filters.

Q: Can't I get the same air cleaning results with portable HEPA units?

A: Studies have shown that air cleaners attached to the main ventilation system are generally much more effective. Plus you would need to buy a number of these devices and put them throughout your home. That would be costly, noisy and intrusive.

Q: How does the performance of CAP HEPA units compare with electronic air cleaners?

A: Electronic air cleaners start off with lower efficiency and their efficiency drops way off as the collection plates get dirty. Most models require frequent, ongoing maintenance. The efficiency of HEPA filter media remains at or above 99.97% throughout the filter loading cycle.

Q: Why do CAP600 & CAP1200 units have their own blowers?

A: These low energy-consumption blowers overcome the resistance of the CAP filter media and ensure that the HVAC system airflow remains at normal levels.

Q: How do I know when to change CAP filters and lamps?

A: To maintain peak performance, the inexpensive first stage pre-filter should be replaced monthly and the intermediate filters when the amber ‘change filter’ lamp illuminates. UV and UV Plus lamps should be replaced annually, and the HEPA filter every 2 to 3 years. Contact your installing dealer for an annual replacement filter and lamp kit.

Filtration Efficiency Comparison

	Electrostatic Filter	Electronic Air Cleaner	HEPA Filtration (CAP600EC)	HEPA + UVGI (CAP600-UV & CAP1200-UV)	HEPA + UV Plus (CAP600-UVP & CAP1200UVP)
Average Efficiency @ .3 micron size	<5%	<20%	99.97%	99.97%	99.97%
Odor Removal	P	P	G	VG	E
Bacteria	P	G	VG	E	E
Mold & Fungi	P	F	E	E	E
Tobacco Smoke	P	G	VG	VG	E
Ongoing Cleaning & Maintenance	Yes	Yes	No	No	No
Chart Key	E = Excellent	VG = Very Good	G = Good	F = Fair	P = Poor

Five models are available:

CAP600EC
CAP600-UV
CAP600-UVP
CAP1200-UV
CAP1200UVP