CLEAN, HEALTHY AIR FOR YOU AND YOUR FAMILY





The Importance of Indoor Air Quality

Respiratory ailments, often attributed to poor indoor air quality (IAQ), represent the third largest cause of death in the U.S., ranking only behind heart disease and cancer, according to the American Medical Association. The EPA has said that indoor air is often 7-10 times worse than outdoor air. "Tight" homes limit air infiltration and natural ventilation. This leads to stale, smelly or stagnant air inside homes and the "trapping" and concentrating of pollutants and contaminants in the home — everything from cooking odors and cleaning chemicals to pesticides and personal care products become mixed together and re-circulated in our homes.

It is the very fine sub-micron particles that we breathe that are absorbed into our bodies that our natural defense systems cannot eliminate. And problems with indoor air quality go beyond health related issues – productivity, absenteeism, and even one's sense of well-being may be adversely affected by poor air quality. Visible particles represent only a small fraction of particles found in indoor air. There are millions of particles in the average cubic foot of indoor air and 98% of those particles are 5 microns or less.

Eye of a Needle = 500 to 2000 microns

Human Hair Diameter = 40 to 300 microns

Pollen = 10 to 50 microns

Mold Spore = 10 to 30 microns

Tobacco Smoke = .3 to 1 micron

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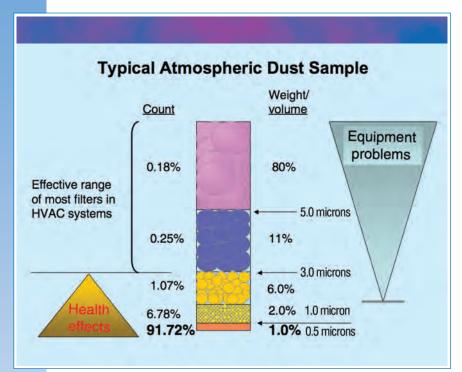
Good Solutions for Poor IAQ

There are three basic approaches to improving indoor air quality. You can (1) control or eliminate the source of pollutant, (2) dilute the contaminant, usually through ventilation, and you can (3) remove the contaminant from the air by filtration. It's not always possible to reduce or eliminate the contaminant source. Ventilation can be a good approach, but the source of the contaminant may be in the outside air itself. And fresh air ventilation can increase heating and cooling costs.

Filtration is often the most practical approach although there are sometimes tradeoffs with effective filtration. The most common and inexpensive air filters are designed to protect heating and cooling equipment from large particles that can clog indoor coils and air handler components. They create very little air resistance that makes it easy for equipment to run, but they provide very little in terms of filter efficiency. At the other end of the spectrum are super high efficiency HEPA filters.

Passive filters, including HEPA filters, trap particles by limiting the size of the spaces that air can pass through. Here the tradeoff for filter efficiency is air resistance. Higher efficiency filters have higher air resistance which makes heating and cooling equipment work harder, thus using more energy and shortening the life of the equipment.

Older whole house electronic precipitating air cleaners electrically charge the particles passing through them, and then attract the particles to a series of oppositely charged collector plates where the dirt accumulates. Collector plates are then removed periodically for cleaning. Unlike passive filters that become more efficient as they load, the efficiency of precipitating air cleaners drops off dramatically as they load. And precipitating air cleaners sometimes produce Ozone, which the EPA has identified as being harmful to health.



The Dynamic Polarized-Media Electronic Air Cleaner

Dynamic Air Cleaners use electronic polarized-media technology to provide maximum ozone-free air cleaning. Active electronic, polarized-media air cleaners use a safe, 24 volt current to establish a polarized electric field. Airborne particles pass through the field and adhere to the media. Like a passive filter, the polarized-media increases in efficiency as it loads. Polarized-media air cleaners provide very high efficiency with air resistance much lower than passive filters that claim similar efficiencies.

Dynamic Air Cleaners are ideal for removing odors as well as the smallest sub-micron particles, airborne viruses, pathogens, and volatile organic compounds (VOCs). This includes dust mites and dust mite feces, one of the largest causes of allergies. Electronic polarized-media technology is non-ionizing which means no Ozone is produced.



The Dynamic Difference

The biggest performance advantage that the Dynamic Polarized-Media Air Cleaner offers over other air cleaners is its efficiency with the smallest sub-micron particles. The Dynamic Air Cleaner captures 97% of particles at .3 microns and continues trapping particles much smaller in size. Tiny sub-micron particles that pass through the air cleaner become polarized. Polarized particles are charged with a positive pole and a negative pole. Unlike ionized particles that pass through precipitating air cleaners, they do not attract to the first oppositely charged surface they encounter. Rather, they re-circulate in the air stream and attach to other polarized particles, chemicals and odors. This process of agglomeration causes the particles to increase in size, where they collect in the air cleaner media on subsequent passes. Over time, even the smallest particles—those we breathe—are removed from the air.

Dynamic Air Cleaners install quickly into existing filter tracks, without costly ductwork modifications, turning your home's central heating & cooling system into a whole house air cleaning system. And maintenance is a breeze. Each Dynamic Air Cleaner uses a disposable replacement media pad which can be replaced in just minutes. Each media pad will keep your air cleaner running at peak efficiency for three to five months, depending on individual lifestyle.

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Dynamic Air Cleaners deliver superior air cleaning results throughout the world.

Dynamic Air Cleaners are powerful enough for the most rigorous applications. They are the number one choice of the casino industry, clear the air in industrial and clean-room facilities, control airborne pathogens in hospitals, food processing, and government

installations, combat Sick Building Syndrome in schools and offices and bring about significant operational savings in general commercial buildings. Dynamic Air Quality Solutions also has a full range of products to provide superior air quality for the home.



Dynamic Germicidal Systems

Dynamic Air Quality Solutions has been designing and building patented germicidal air cleaning systems for over 25 years. The RS-3 Germicidal System utilizes a uniquely powerful combination of polarized-media air cleaners in a V-bank configuration and a focused, scanning beam of UVC light. The key for UV light to be effective is contact time between the light and pathogens. In the Dynamic RS-3, airborne pathogens are caught in the sparse polarized media where the UV light is able to penetrate and hit them again and again to inactivate pathogen cells. The Dynamic RS-3 provides the ultimate in effectiveness for residential and light commercial air cleaning systems.



Dynamic Time-Release Drain Pan Treatments

Dynamic Time-Release Drain Pan Treatments utilize state-of-the-art time-release polymer technology to provide cost effective prevention against odor-causing bacteria that can form in condensate drain pans. Studies by utility companies and independent universities show that an improperly maintained, dirty HVAC system can increase utility payments by as much as 40%.

Dynamic Pan Treatments provide dependable, sustained time-release protection and can be used safely in air conditioner and refrigerator drain pans, and other non-potable water retention areas. The pan treatment remains dormant when the drain pan is dry and will continue activating and deactivating as wet and dry conditions change. As it activates, it adds a light, pleasant scent to the air.

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