

Air Filters

At a basic level, an air filter should filter out the particles that cause irritation such as pollen, spores, dust and other contaminants that circulate in our homes everyday. If you ask most consumers what filter they use, they would probably tell you that it was the standard cardboard 1 inch throw-away. But did you know that the standard throw-away filter is only 30% effective in removing dust and particles from the air. And they have no effect on pollen, micro-organisms, smoke or other similar pollutants.

There are basically two kinds of air filters: a furnace-mounted, whole-house unit or a portable single room unit. Both types of cleaners have different models with varying methods of cleaning the air and capacities for doing so. Your dwelling may help determine the right unit for your needs. It's important to note that both room and system air cleaners come in a variety of models, and that not all models use the same technology to clean the air.

Each cleaner type has its pros and cons, which may differ depending on your air cleaning requirements. Take a look at what your needs are based on your dwelling and choose the best unit to maximize your benefits.

What is the most effective air cleaner?

High Voltage Electronic Air Cleaners, like the American Standards AccuClean, produce the best results, they capture up to 99.98% of all airborne pollutants including bacteria, dust, animal hair, dust mites, mildew, lint, funguses, smoke, cooking grease, and even many viruses. These same air pollutants may also compromise your air conditioning equipment by forcing it to work harder, thereby, reducing its energy efficiency and possibly it's lifespan. A high voltage electronic air cleaner simply consist of a case and the American Standards AccuClean whole house filtration system. If you have severe allergies the American Standards AccuClean is the best.

The next best is the Electronic Air Cleaner. There are two types of electronic air cleaners. Both electronically charge particles and attract them to a collection material. The standard electronic air cleaner will collect charged particles on a "plate" designed to attract those particles. Most electronic cleaners can obtain 95% efficiency or more on various particles when the collection plates and ionizing wires are clean, but they can lose some efficiency as they collect dirt.

The next best is a Media Air Cleaner. These units use high efficiency pleated media to remove large particles with over 89% efficiency, including many allergens. With irritants in the spore and pollen range, they are as effective as a HEPA filter. Where they differ is in the capability to filter out the super small particles such as bacteria, viruses and respirable dust.

The last and least efficient filter is the Electrostatic Air Cleaner. Based on heating and air conditioning industry standards, electrostatic air filters are not recognized as true high

efficiency air cleaners. However, they are generally recognized as being more effective than the standard cardboard 1 inch throw-away filters. Electrostatic air filters depend on the movement of the air through the filter to give particles a weak electronic charge. Usually, these models are less than 20% efficient, with some models having efficiencies of less than 5%. They need to be cleaned often to maintain air flow, sometimes weekly.