



Make Your Own Indoor Weather

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Have you ever wondered what is in your home's air? When you take a deep breath and look to the sun beaming through your living room window, spotlighting floating particles of ... what is that? This is what your family is breathing everyday, that's what. A mere 1% of the floating particles are visible to the naked eye. That leaves 99% that you can't even see! Human hair, pollens, pet dander, plant spores, fungi, and bacteria are the most common inhabitants of the average home. Families with asthma and allergies suffer greatly from these tiny intruders.

The standard furnace filter removes some of the larger contaminants that would otherwise circulate through your heating system, operating at 17% efficiency, but smaller particles can pass through the filter unnoticed. There are several ways to fight the invisible enemy in your home beyond this standard furnace filter.

- First and foremost there is the Electrostatic Air Filter. This is going to be the least expensive of the units we'll talk about here, costing anywhere from \$50-\$150 and won't need to be replaced if you are cleaning it regularly. These are anti-microbial, have a high dust and particle holding capacity and remove pollen, dust and airborne pollutants with 94% efficiency. As the air passes through a maze of static prone fibers, an electrostatic charge is generated. Airborne particles are attracted and held by the static charge of the filter. When washing this filter, the static charge releases the particles. Just replace your existing furnace filter with the electrostatic and you're done!
- Next up we have the whole-house Electronic Air Cleaner. This option will cost between \$850 and \$1,000 in addition to installation, depending on your duct system. This unit is 99% efficient at catching airborne particles and 72% efficient at catching particles at 0.3 microns, that's 600 times smaller than the tip of your pencil point! Electrical current charges airborne particles and collects them like magnets on the fins of the "cell." Cells need to be cleaned regularly, but are easily placed in a dishwasher (with LIQUID soap only) and re-installed when they're dry. This is a much higher up-front cost, but in my opinion the most worry-free and convenient for today's homeowner.
- And whenever there is a convenient way to do things, they always develop a better way! This better way is the Ultraviolet Air Treatment System. Much simpler than they make it sound! This is a \$900+ installation, but very innovative. These are mounted in your ductwork. The unit continuously emits UV energy that kills airborne bacteria passing by the light. The single lamp return air model kills up to 70% of airborne bacteria, the dual lamp model kills up to 87%. And not to worry! These units not only have a unique design that won't let the UV bulbs light unless properly mounted and special light pipe to safely view the bulb's operation, but these lights do not produce ozone, which is a concern with most UV products. The bulbs in these units do need to be replaced every couple of years - so do prepared for the additional maintenance cost.
- There is also the iWave ion generator. This unit is installed inside of your furnace and is maintenance-free with no replacement parts and a self-cleaning mechanism. These units cost around \$700 or so installed and also do not produce ozone.

No matter which breathing or allergy problems your family suffers, there is help in the heating and air conditioning industry! Give your HVAC contractor a call today!