

Introduction to the H3 Series Air Cleaning System

Welcome to the world of advanced and critical air filtration for the home and office created by HEPA Corporation the manufacturer of THE TRUE HEPA FILTER.

HEPA Corporation offers its NEW Hybrid system; one of the most powerful and effective air filtration systems for removal of airborne irritants. It combines the technology of hospital vector systems used in operating rooms, contamination/isolation rooms and wards with contamination-free systems used in cleanrooms for pharmaceutical, semiconductor and other critical clean manufacturing.

Its Vector design allows for placement into the room's corner and provides extremely fast clean air broadcast. This broadcast or distribution of clean air changes "flushes" the air much more efficiently than the typical box systems currently offered. **SEE DIAGRAM.**

The H3 Series is a TRUE HEPA system that removes 99.99% of all particles 0.3 microns and larger. This is the best efficiency for removal of airborne mold, bacteria, allergens and pollen which range from over 0.3 microns to over 10 microns. The H3 Series will also capture virus particles as small as 0.1-0.12 microns.

Human hair is about 100 microns. And, 10 microns is the smallest the human can see.

Note that efficiencies of 99% or 95.0% are not TRUE HEPA efficiencies, and will allow unfiltered particles from one to five microns respectively to pass through the filter.

COMPARE:

If your room air has 1,000,000 particles per cubic foot in it (*some rooms have as many as 10,000,000 or more particles per cubic foot*)

A 95% filter leaves 50,000 particles **per cubic foot** in the room 0.3 microns size and larger

A 99% filter leaves 10,000 particles **per cubic foot** in the room 0.3 micron size and larger

A 99.99% HEPA filter leaves only 100 particles **per cubic foot** in the room 0.3 microns size and larger

WHAT IS AN AIR CHANGE? :

A room "air change" is one complete flush of old air replaced with cleaner filtered air. The more air changes the air cleaner can produce the cleaner the room becomes because it's re-filtering filtered air.

Critical isolation situations in hospitals typically require 6 air changes per hour or 1 air change every 10 minutes. **This is ideal for allergy and asthma sufferers. The H3-1 surpasses this critical hospital standard by changing the air 7.5 times per hour or an air change every 8 minutes in a 600 square foot room with an 8 foot ceiling. And, changes the air even faster in a smaller room. It will do all of this with a sound level of 60 dbA.**

For its size no other systems can match this kind of performance.

THE SMALLER H3-2 IS ALSO VERY POWERFUL AND VERY QUIET:

On **HIGH** speed, it will provide air changes every 7 minutes in 300 square foot room with an 8 foot ceiling.

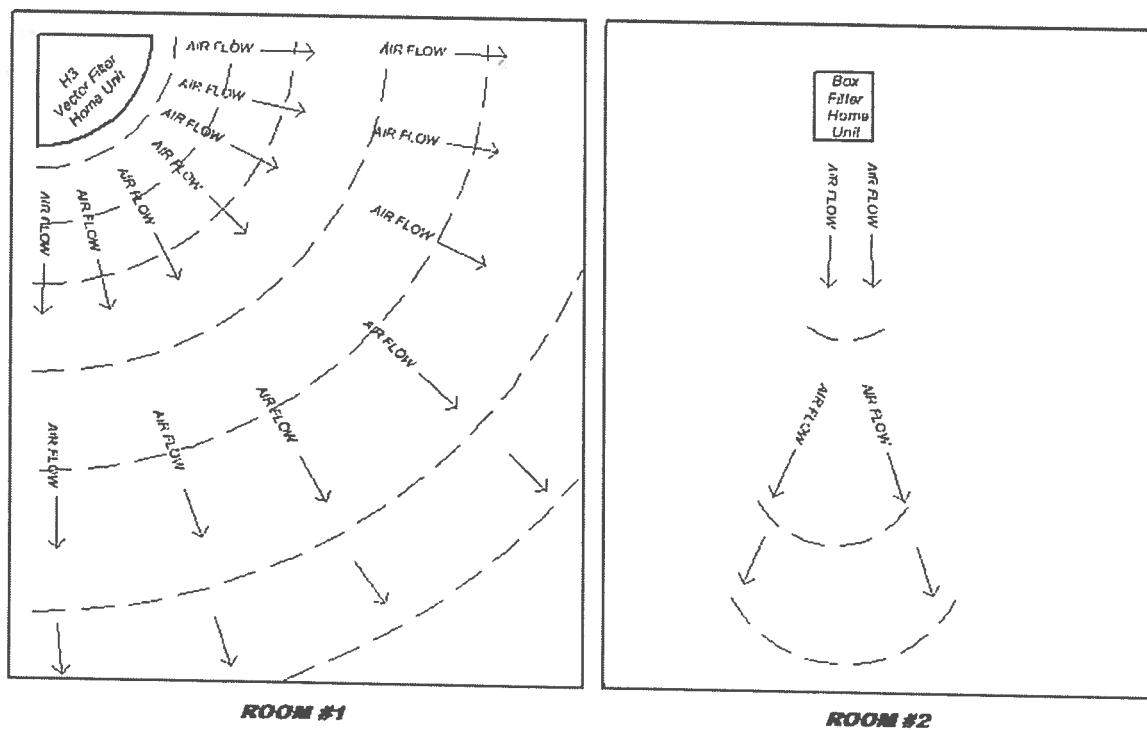
For its smaller size, no other systems can match this kind of performance.

THE H3 SERIES IS BEAUTIFUL:

All other available home air cleaners look like an airline suitcase, or an oil drum. The wood finish and the corner placement of the H3 Series allow the system to match your furniture and décor and almost disappear from sight.

HEPA Corporation's H3 system offers the best of both worlds. It provides the best hybrid air filtration while blending-in with the décor of your home or office. What could be better?

Proudly made in America by proud American



HEPA Corporation does not offer electrostatic products since they produce ozone resulting in acidic air harmful to the lungs.

How to Calculate Room Air Changes

Calculating how much clean air you'll need to clean a room's air requires knowing the size of the room in cubic feet or volume of the room, not square feet alone.

- 1) Calculate the room's volume by multiplying the width, length and height of the room.
Example: 20' long x 30' wide x 8' ceiling height = **4,800 cubic feet** (volume).
- 2) Determine how many air changes you need per hour? *Critical health rooms such as those used for asthma patients usually need about 6 air changes per hour, where non-critical rooms require less.*
Now, multiply the room's volume **4,800** by the number of changes you need.

Example: 4,800 x 6 changes = 28,800 cubic feet. And now, divide that by 60 (minutes in an hour). This confirms you need an air cleaner that's been tested and can deliver at least **480 CFM** (cubic feet per minute) at 99.97% @ 0.3 microns for 6 changes per hour.

Formula for 6 changes: Room Length X Room Width X Ceiling Height (all in feet) X 6 air changes divided by 60 minutes equals CFM (cubic feet per minute) of air flow required by the air cleaner at TRUE HEPA efficiency.

$$\text{Or: } \frac{20 \times 30 \times 8 \times 6}{60} = 480 \text{ CFM}$$

The more air changes the air cleaner can produce the cleaner the room becomes because it's re-filtering filtered air. Many suppliers do not disclose their air cleaner's true performance including the volume of a room, the CFM rating of the air cleaner, how many air changes it can deliver or at what efficiency (%). It might be best to avoid home systems that do not disclose the necessary details that can assure correct performance for your clean air needs.