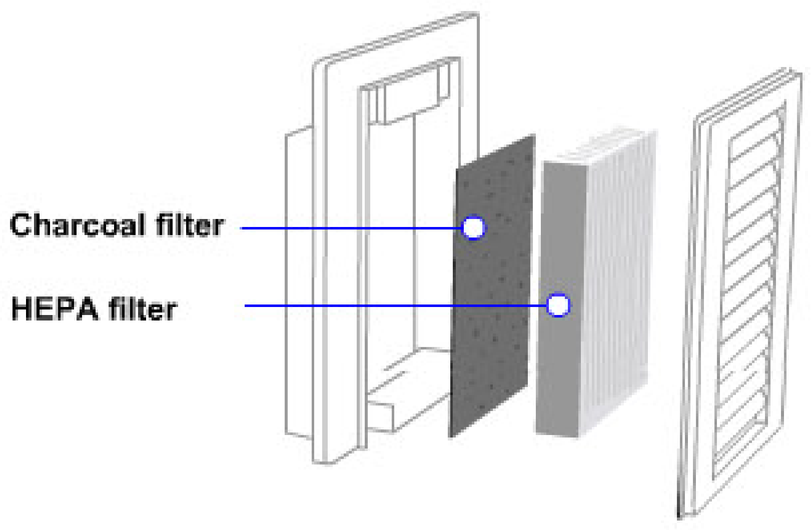
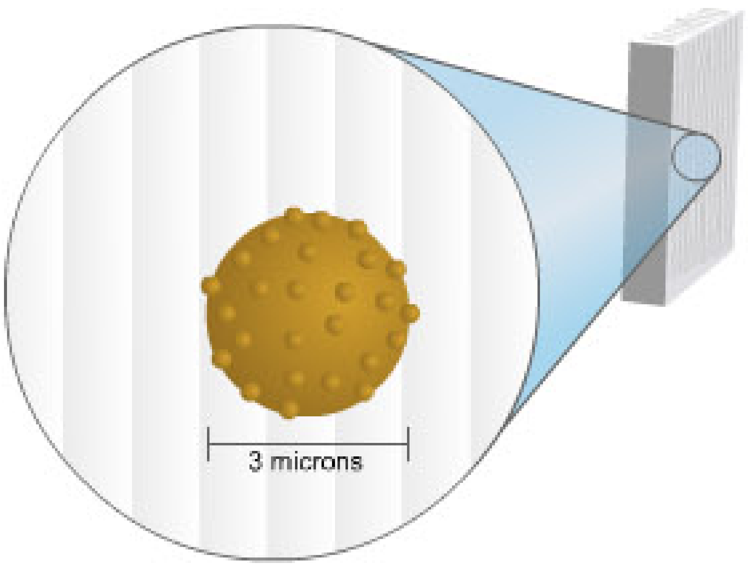
HEALTHY - AIRE
AKH Air Filter

F.A.Q.

What is the efficency of the AKH filters?

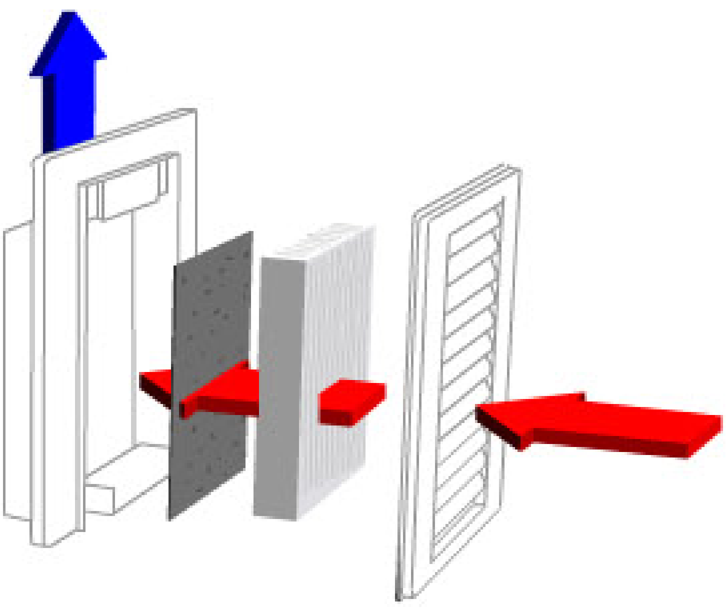
The efficiency of the hi quality HEPA Filter and the activated charcoal filter are 99.9% and 90% respectively which removes 0.3 Microns size particulate and complete removal of ammonia, acetaldehyde and acetic acid odors





How does the air move through the AKH filters?

As the air is sucked in to the fan it passes through first the HEPA Filter (Particulate) and then the Activated Charcoal filter (Odors and Smoke) it blows out the top



What is the difference between a "HEPA-type" filter and a HEPA filter?
The difference is huge. According to the American Lung Association, the efficiency of HEPA -type filters "may be 55% or less at 0.3 microns," which means that at least 4,500 out of 10,000 0.3 micron particles will pass through. The true medical grade HEPA (High Efficiency Particulate Air) filters, like those used in the CAP600 & CAP1200 models, are certified to a minimum efficiency of 99.97% at 0.3 microns. This means that 3 or fewer particles out of 10,000 will pass through–about 1,500 times less leakage.

Is a HEPA filter less efficient at particle sizes smaller than 0.3 microns?
The 0.3 micron size was selected for HEPA testing because it is the most difficult to capture. Testing by filter manufacturers and filter testing companies has shown that HEPA filters can actually be more efficient than 99.97% for capturing particles smaller or larger than 0.3 microns.

Are the benefits of HEPA filtration recognized by the scientific and health care communities?
According to a 1997 American Lung Association publication, "Because of its high efficiency at filtering out tiny particulates, HEPA filtration is recommended for those individuals who suffer from allergies, asthma or other respiratory problems." HEPA filters have been used for many years for medical, pharmaceutical, nuclear and asbestos and mold abatement applications. An extensive study published in the 1995 American Journal of Respiratory and Critical Care Medicine determined that long-term exposure to high levels of fine particulates is associated with higher mortality risks and shorter life span. Abatement's CAP HEPA systems are often purchased as a direct result of specific recommendations from allergists, pediatricians and other physicians.

Where can I learn more about common pollutants and microbes and how they are filtered?
The following short papers and websites will help you understand what airborn pathogens are and how pathogens and pollutants are filtered from the air.

A short paper on describing how air filters work:
View PDF (152KB) Now >>

A short paper describing how ionization works:
View PDF (87KB) Now >>

A list of airborne pathogens:
View PDF (71KB) Now >>

Airborne Pathogen Database:
http://www.engr.psu.edu/ae/iec/abe/database.asp

A table of sizes of common airborne contaminants.
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