



# Green Buildings

## LEED points from StrionAir

Standard MERV 13 filters meet the intent of the LEED filtration credit. StrionAir products have much broader Green Building impact.

### Existing buildings: A LEED-EB certification example:

#### IEQ Credit 5.1 — Reduced particulate in air distribution

To meet the guidelines for credit under LEED, filters must meet MERV 13 particle capture efficiency as described by ASHRAE 52.2 protocols. That alone is not a terribly challenging goal.

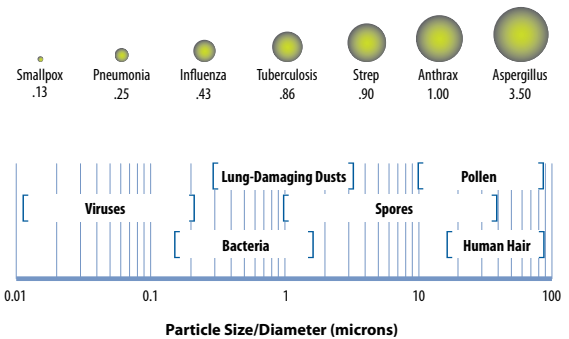
## StrionAir benefits start where others stop!

#### IUOM Credit 1 — Innovations in upgrades, operation and maintenance

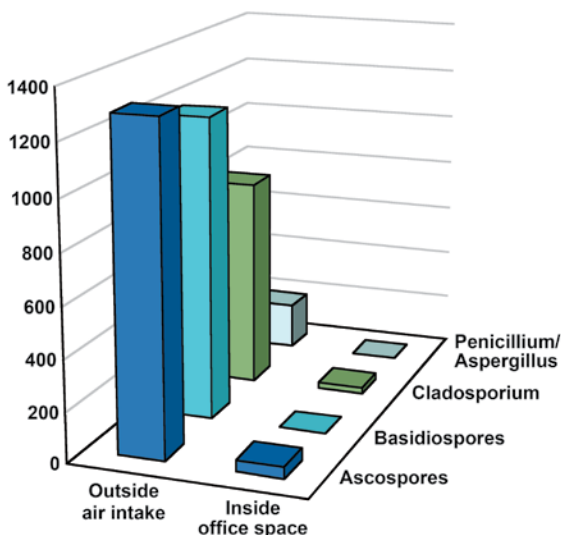
StrionAir products deliver energy efficiency, long filter life, and germicidal action that no other product can achieve. The impact of these benefits for a building owner is so substantial that **the National Geographic Society was able to apply for and receive an Innovation Point solely for the implementation of StrionAir**. This is remarkable, given that typically only the combination of a number of innovative products deliver enough benefit to gain this credit!

#### IEQ Credit 9 — Contemporary IAQ practices

StrionAir's germicidal action can have a direct impact on productivity and health in a building by helping to address building related illnesses (BRI), removing pathogens from the airstream. Only StrionAir filters deliver Capture & Kill™ effectiveness, proven by the CDC.



### National Geographic Society HQ



StrionAir products have been shown to have significant impact on reducing mold spore counts in facilities and should be considered an active part of a mold control program. The germicidal action of the StrionAir products ensures that mold growth in a filter cannot occur.

Today, most air handlers employ Variable Frequency Drives (VFD). A system rated at 500 FPM typically averages around 250 FPM. As airflow speed falls, the electrostatic action of StrionAir technology becomes more effective, increasing efficiency — an effect not found with passive or mechanical air filters, which maintain constant efficiency independent of airflow. At 250 FPM, StrionAir performance rises by a full MERV level.

**EA Credit 1 — Optimize energy performance**

Typical MERV 13 filters have a significantly higher pressure drop than low-MERV alternatives. Air handler energy consumption goes up, air flow goes down, and newer air handlers may have to be designed with larger, more expensive fan/motor combinations. A building’s EnergyStar rating could fall and an EA point could be lost for the benefit of upgrading to MERV 13! Older air handlers may even have to be replaced to accommodate the added airflow resistance.

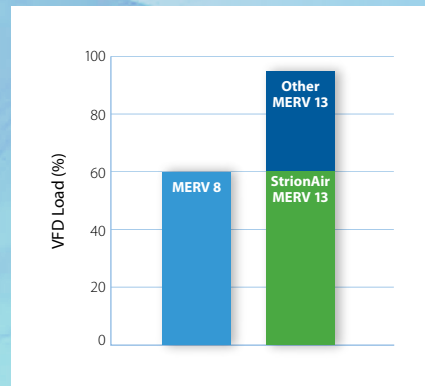
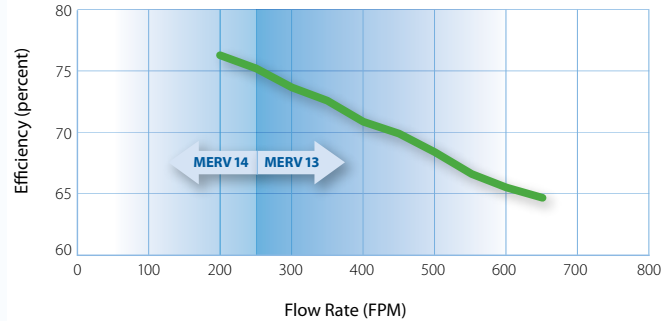
StrionAir’s extremely low pressure drop slashes fan energy consumption. With initial pressure drops comparable to MERV 8 filters, there is no “MERV 13 penalty”, kWh use per square foot improves, and EnergyStar ratings rise.

Additionally, the germicidal action of StrionAir filters destroys mold before it can reach cooling coils. Coil cleanings are reduced, lowering operational costs, downtime, and the use of chemicals. Cleaner coils also have a lower pressure drop, further lowering fan energy consumption.

**MR Credits 5.1-3 — Occupant recycling**

StrionAir filters are constructed with recyclable frames with a filter life generally 50-100% greater than competing filters. This means overall reduced waste and recycling streams. In addition StrionAir filters are often much smaller than traditional filters of comparable performance, so they occupy less landfill mass.

**Particle capture efficiency at sizes of 0.3-1.0 micron (ASHRAE 52.2 E1)**



*MERV 13 “Energy Penalty” observed in a large office building*

**The StrionAir System qualifies for an innovation point — as a stand-alone product.**