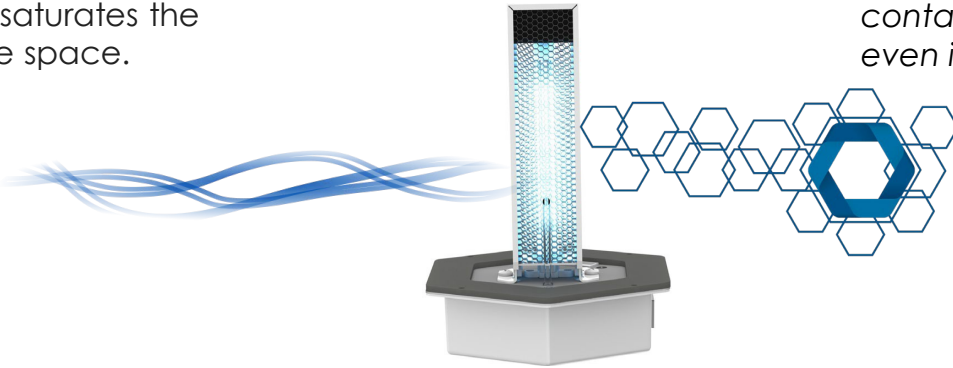


AirShield offers real time protection against mold, bacteria, and viruses, including COVID-19 and all its Variants, by creating a plasma that saturates the entire space.

How it Works

AirShield Plasma continuously attacks and kills pathogens both in the air and on surfaces, protecting people against infection from a contagious person – even in the space!



Step 1
AirShield technology converts air and water molecules into a Cold Atmospheric Plasma (*Plasma*) – often identified as the fourth state of matter.



Step 2
AirShield Plasma saturates the room, killing pathogens in the air to prevent transmission and infection, while at the same time providing continuous deep-cleaning of all the surfaces. Everyone in the room is protected from everyone else in the room.



Step 3
 The *Plasma* reverts to its natural state, air and water, leaving no harmful byproducts.

Notable Customers



Ankara Oncology Hospital
AirShield shown to be 3 to 8 times more effective than cleaning at reducing pathogens in infected patient rooms.



Illinois High School
AirShield showed a 23% reduction in absenteeism. During COVID, the high school had over 90% less infections compared to average schools.



Ultimate Lab Office Study
 The largest space used in a study (22,000ft³) shows one *AirShield* device effectively reducing pathogens by 87% in the air and on surfaces



Infectious Disease Journal
 Researchers independently publish the first peer reviewed paper on *AirShield*



University of Florida
AirShield shows efficacy on Covid-19 with reductions of 98% and 99% on air and surface.



MCR Indoor Growing
 Bacterial counts reduced on organic produce while maintain the quality of plants and crop yields.





AirShield Represents a Paradigm Shift in Purification

- Present air and surface cleaning systems were simply not designed for the real-time action needed to stop the spread of infections, diseases, and pathogens.
- *AirShield* provides real-time protection against the spread of airborne infectious diseases while continuously deep cleaning all surfaces to prevent the growth of even hard to kill pathogens such as fungi.
- Our proprietary *AirShield Plasma* is tested and validated against pathogens for virtually every indoor application and creates a new standard for Indoor Air Quality (IAQ).

Air Filtration

Since the air must be circulated from the room through the filter, clean air will then be mixed with remaining contaminated air to, hopefully, dilute the level of any pathogens.

Air filters were designed to clean the air of particles, NOT kill pathogens. If there is an infectious person in the room the pathogen will likely grow on the filter itself in addition to spreading the virus throughout the room - and any connecting rooms depending on how extensive the central ductwork.

Surface Cleaning

In addition to being limited by available staff, frequency, and quality control, surfaces are very susceptible to reinfection when areas are occupied.

Because *AirShield Plasma* completely fills a room - and is safe for occupied areas - it is in constant contact with all surfaces, thereby continuously deep cleaning and sanitizing them to a degree not otherwise attainable.

In Air

AirShield actively protects people even in a contagious space by filling the space with a *Plasma* that stops transmission of pathogens by killing them.

Filter based systems require the air in a room to be "treated/filtered" by circulating the room air through the device. Thus, their basic design does not prevent transmission and infection, which is critical to protect people from a contagious person in the room!

Given that recent variants are vaccine resistant, it is now – more than ever - critically important to kill the virus BEFORE it infects people.

On Surfaces

AirShield is the only system that offers medical-grade, deep-cleaning in occupied spaces.

Viruses and other pathogens have developed several levels of innovative defenses which protect them from sprays and surface cleaning such as "once over with a Clorox-soaked rag".

No matter how well a room is cleaned/sanitized, once it is occupied it is subject to being contaminated by a contagious person: exactly what we are trying to prevent!

AirShield is the only system that can continue to clean and protect against contagions in an occupied room.

Ankara Oncology Hospital: *AirShield* shown to be up to 8 times more effective than cleaning to reduce pathogens in infected patient rooms.



Why AirShield is Superior to Other Technologies

- *AirShield* is superior to other technologies because it kills pathogens and provides continuous, real-time protection from infection.
- Other technologies capable of killing pathogens – Ozone (O₃), Direct UV radiation, Hydrogen Peroxide (H₂O₂)- cannot be used in occupied spaces so cannot protect people in occupied spaces.
- Technology that relies on diluting contaminated air with clean air - whether they be based on filter, UV, PCO, or other technology – can only reduce, not eliminate, the probability of being infected because their technology cannot fully clean a room if there is a contagious person in the room! As contaminated air is being drawn to the cleaner, the contagious source continues to contaminate the room.
- Our world-wide patented process replicates the sun's natural, safe purification process indoors. The use of our unique *AirShield* Plasma can achieve new levels of Indoor Air Quality while also providing superior surface cleaning and real-time protection from infectious pathogens.

Has it Been Proven? Yes

AirShield is the most validated purifier on the market and was the first to prove efficacy against SARS-CoV-2 (COVID-19). It has been tested by world recognized organizations including: the University of Florida, Central Michigan University, Kansas State, University of Colorado Hospital (UCH), Insight Institute of Neurosurgery and Neuroscience, Ankara Oncology Hospital, Pontiac General Hospital, NSF, Ultimate Labs, and the CDCs of various different countries.

"In our hospitals, clinical facilities, inpatient and outpatient facilities we have not had single patient or personnel catch the virus [Covid-19] while on site."

Dr. Jawad Shah, MD'
Insight Institute of Neurosurgery

AirShield is Safe

AirShield's patented technology replicates nature's own way and is a certified organic purification process. Kansas State University has tested *AirShield* for any harmful byproducts and demonstrated the technology poses no risk to people, plants or animals. *AirShield* is registered with the EPA, meets all NIOSH, OSHA, and EPA safety guidelines.

Does it Benefit Me?

AirShield creates a new standard for Indoor Air Quality by killing pathogens in your indoor space, making your environment healthier for people, animals, and plants. This reduces operating costs, increases productivity, and ensures a happier, healthier indoor environment.

When *AirShield* was introduced in the 5th year of a 5-year study, absenteeism due to sickness was reduced by 23% over the previous 4-year average. Absenteeism due to sickness costs U.S. businesses in excess of \$220 billion per year in lost wages and productivity.

US food borne pathogens leading to illness and food waste costs in excess of \$16 billion per year. *AirShield* reduces this risk by killing pathogens that cause outbreaks: not only protecting crop yields normally lost to bacterial rot, but also extending the shelf life of fresh products.

As featured on:



Value Proposition

VirusKiller is ready to work with serious, potential customers to properly consider a wide range of inputs to develop the most effective implementation plan for an AirShield installation including the scope, stages and inherent flexibility.

While we worry about the spread of disease, concern over Indoor Air Quality (IAQ) has identified many important considerations in planning work, living, meeting, and recreational spaces that were previously not major factors.

Covid-19 restrictions clearly focused people's attention on the many uses of indoor spaces and how they could be better adopted: healthier, safer, multi-functional, more energy efficient, happier, friendlier . . .

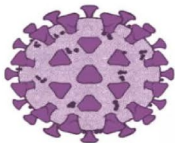
There have been attempts to bring the outside inside - particularly attention has been focused on more ventilation to dilute the density of possible pathogens present indoors.

Adding highly efficiency filters and high-capacity fans to provide more fresh air for indoor spaces to make them more like outdoors is a major capital investment in addition to consuming significant amounts of additional costly energy. It also stretches the band of comfortable target temperatures (hotter in summer, cooler in winter) making the indoor environment less pleasant.

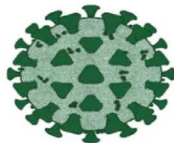
Using HVAC systems to kill pathogens and bring the outside inside is both costly and ineffective. Additionally, it ignores any consideration of solid research that supports the positive effects of ionized air: confident outlook, healthier environment, and even the healing effect of ions.

Decisions on IAQ, cleaning, sanitizing, social distancing, masks, isolation, and protection from pathogens is a fairly complex undertaking. This is the reason that VirusKiller places so much emphasis on the initial design and integration of its systems with each customer's existing systems and goals. It is important to know if the goal is to meet current CDC Guidelines, or if it is more towards the other end of the spectrum and targets a "bubble level" safety goal to provide maximum protection for all occupants. Initial capital cost, operating cost, energy use or reduced energy consumption, impact on absenteeism due to sickness, quality of life, all become important considerations. Many of these considerations are subjective, but - surprisingly - most of them have some basis for economic analysis.

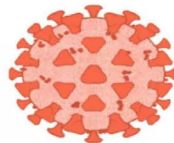
AirShield has successfully tested against all variants of coronavirus, some of them include:



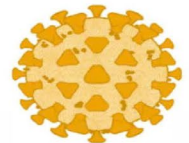
SARS-CoV-2



Beta



Delta



All Variants

↓ 97.7%

↓ 98.7%

↓ 99.8%

↓ 99.0%

*Tested on both aerosolized and surface bound coronavirus



Solutions for Air

Why AirShield is Different

Ventilation & Filtration: primarily removes harmful particulates like pollen, dust, and smoke. Dramatically increasing capacity can also supply clean air to dilute, but not eliminate, pathogens



AirShield continuously protects the entire room by killing pathogens to prevent transmission and infection. It provides this real-time protection without requiring room air to be circulated through a central sanitizer exposing everyone in the room to contagions.

Germicidal UV radiation: are usually mounted in the duct but can be adopted to stand alone units.



Like filtration, GUV is limited because contaminated air must pass through the device, which severely limits its potential efficiency and exposes everyone in a space to continuing contamination from a contagious person .

Needlepoint Ionization: Needlepoint bipolar ions (negative ions + positive ions) can improve filter systems by killing some of the pathogens circulated through the system.



Like filtration, Needlepoint Ions are limited because contaminated air must be circulated through the small space where the needlepoint ions are concentrated.

While effective in "shoe box" sized space in lab testing, they have not been proven in room size environments because of their short life (<a minute) and large volumes needed to fill a room, let alone maintain saturation.

PCO: Photocatalytic oxidation (PCO) is created by exciting a titanium oxide catalyst with UV radiation to create hydroxyl radicals in a "kill chamber"



These chambers are very effective in killing pathogens. However, since the contaminated air has to be circulated through the chamber, its potential effectiveness is severely limited because everyone in the space remains exposed to continuing contamination from a contagious person .

Solutions for Surfaces

Why AirShield is Different

Cleaning Chemicals: Most common form of surface purification, requires chemicals, labor, and supervision



Cleaning is good but should be distinguished from sanitizing. *AirShield* is an essential addition to the cleaning process. It does not depend on manual labor and does not have to be supervised. Its constant contact over long-periods deep cleans and kills even pathogens that are resistant to the strongest cleaning products,

Far UV: There are reasonable arguments that UV radiation in the 222 nm is less dangerous to people (eyes & skin) than other UV wavelengths



While studies continue, Far UV still requires line-of-sight, its efficacy drops with distance, and leakage outside 222 nm range remains a potential danger. *AirShield* has been shown to be more effective and proven safer at a fraction of the cost

Fogging: Ozone (O₃), hydrogen peroxide (H₂O₂) or other chemical gasses. Can be very effective at disinfecting a large space



While fogging is very effective, it lasts only if anything capable of transporting pathogens remains outside of the space. *AirShield* disinfects better while remaining safe to operate 24/7/365, actively working on pathogens while people, animals, and plants are present.



VirusKiller

Air Reductions

VOC	Reduction	Testing Organization
Acetaldehyde	96.00%	Hye-sung Environment Inc. Korea
Acetone	97.81%	Ministry of Healthcare of Ukraine
Acetone	89.75%	Atmospheric Analysis-Consulting
Ammonia	82.90%	Guangdong Detection Center of Microbiology
Ammonia	93.00%	Hye-sung Environment Inc. Korea
Ammonia	97.57%	Ministry of Healthcare of Ukraine
Bacteria	95.50%	Ultimate Labs
Benzene	80.00%	Guangdong Detection Center of Microbiology
Butanone	97.00%	Hye-sung Environment Inc. Korea
Butyraldehyde	87.00%	Hye-sung Environment Inc. Korea
Carbon Disulfide	99.99%	Atmospheric Analysis-Consulting
COVID 19 (BETA Variant)	98.70%	University of Florida College of Medicine
Dimethyl Disulfide	71.00%	Hye-sung Environment Inc. Korea
Dimethyl Sulfide	87.00%	Hye-sung Environment Inc. Korea
Formaldehyde	81.10%	Guangdong Detection Center of Microbiology
Hydrogen Sulfide	97.00%	Hye-sung Environment Inc. Korea
i-Valeric Acid	94.00%	Hye-sung Environment Inc. Korea
Methyl isobutyl ketone	99.99%	Hye-sung Environment Inc. Korea
Mold	99.99%	Ultimate Labs
n-Butyric Acid	98.00%	Hye-sung Environment Inc. Korea
n-Valeric Acid	69.00%	Hye-sung Environment Inc. Korea
Propanol (IPA)	60.69%	Atmospheric Analysis-Consulting
Propene	99.99%	Atmospheric Analysis-Consulting
Propionaldehyde	92.00%	Hye-sung Environment Inc. Korea
Propionic Acid	75.00%	Hye-sung Environment Inc. Korea
Styrene	86.00%	Hye-sung Environment Inc. Korea
Toluene	99.00%	Hye-sung Environment Inc. Korea
Toluene	99.99%	Atmospheric Analysis-Consulting
Total VOC	83.20%	Guangdong Detection Center of Microbiology
Trimethylamine	93.00%	Hye-sung Environment Inc. Korea
Xylene	95.00%	Hye-sung Environment Inc. Korea



Surface Reductions

Pathogen	Reduction	Testing Organization
Acinetobacter baumannii	98.22%	Ankara Oncology Hospital
Aspergillus brasiliensis	84.15%	UC Colorado Hospital
Bacillus atrophaeus	99.81%	Kansas State University Food Science Institute
Bacteria	99.45%	Institute Jantung Negara PICU Malaysia
Bacteria	99.98%	Quadrants Scientific Inc - Golds Gym
Bacteria	99.63%	Quadrants Scientific Inc - Nail Salon
C. Diff	99.53%	NSF international Lab
Candida albicans	99.99%	Kansas State University Food Science Institute
CRE	99.98%	Kansas State University Food Science Institute
Coronavirus 229E	99.00%	Central Michigan University College of Medicine
COVID 19 (SARS-CoV-2)	97.70%	University of Florida College of Medicine Australia
COVID 19 (DELTA Variant)	99.78%	Government Lab
Dengue virus type 2	99.00%	Central Michigan University College of Medicine
E. coli	99.59%	Kansas State University Food Science Institute
E. coli	99.99%	Ministry of Healthcare of Ukraine
E. coli O157:H7	99.41%	Kansas State University Food Science Institute
Enterococcus faecalis	99.99%	Ministry of Healthcare of Ukraine
Fungus	99.99%	Ministry of Healthcare of Ukraine
H1N1	99.60%	Guangdong Detection Center of Microbiology
Legionella	99.99%	Kansas State University Food Science Institute
Listeria monocytogenes	99.87%	Kansas State University Food Science Institute
Mold	89.00%	Ultimate Labs
MRSA	99.24%	Kansas State University Food Science Institute
Pseudomonas aeruginosa	74.88%	UC Colorado Hospital
Pseudomonas aeruginosa	99.54%	Kansas State University Food Science Institute
Stachybotrys chartarum	99.99%	Kansas State University Food Science Institute
Staphylococcus aureus	99.99%	Ankara Cancer Education and Research Clinic
Staphylococcus aureus	99.15%	Turkey Kansas State University Food Science
Staphylococcus aureus	99.90%	Institute Pontiac General Hospital
Staphylococcus aureus	74.88%	UC Colorado Hospital
Staphylococcus epidermidis	99.99%	Ministry of Healthcare of Ukraine
Streptococcus pneumoniae	98.83%	Kansas State University Food Science Institute
Total Aerobic Count	66.49%	Meat Production Plant
Total Coliforms	93.88%	Meat Production Plant
VRE	98.22%	Ankara Oncology Hospital



AirShield Cores



VK Units Specs

23.7" X 15.1" X 7.1" (with base)
21.5" X 15.1" X 6.5" (without base)
13 lbs.

Plug in, mount on wall or table
Energy usage: 25-watts
One-time capital investment with minimal maintenance (wash screen filters every few months, change HEPA every 2-3 years)
Stand alone, or wall mount

Unit	VK-2	VK-5	VK-10
Coverage (sq. ft.)	750	1500	3000
Room (ft)	(25x30)	(50x30)	(50x60)

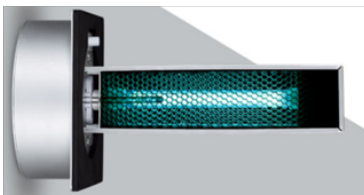


Hex Units Specs

12" X 12" X 3"
6 lbs.

Plug in, mount on wall or table
Energy usage: 25-watts
No Maintenance
Industrial Strength
Stand alone, or wall mount

Unit	HEX-4	HEX-10
Coverage (sq. ft.)	1000	4000



VK Duct Units Specs

Energy usage: 25-watts
Conditioned air is mixed with *AirShield*
No Maintenance
Implementation through HVAC Systems

Unit	VK-5 Duct	VK-9 Duct	VK-14 Duct
Coverage (sq. ft.)	1600	2400	4000
CFM	3000	6500	9000

To Find Out More Call or Email:

Dave@EQDG.com

(425)941-5363

Protect your Spaces with *AirShield*