

HOMES:

As we spend more time at home today, discover the critical link between code minimum ventilation rates in residential HVAC systems and the potential impact on occupants when a virus strikes or general IAQ and submicron particle control. In a household where one person becomes infected, or code mandated minimum, inadequate ventilation allows airborne pathogens to linger. This increases the risk of transmission, putting everyone at greater vulnerability.

Step into the unseen world within your home, where indoor air transforms into a bio dome of life. Teeming with complex organisms and sub-micron particles, it's a microscopic ecosystem. Unveil the mystery and take control of your indoor environment with Reviveaire. Our solutions empower you to breathe cleaner, healthier air inside your home—where every particle matters and your well-being takes center stage.

Elevate your home environment with enhanced filtration solutions, mitigating the impact of viruses and fostering a healthier, safer living space for all.

PRIVATE RESIDENCE AIR TESTING BEFORE & AFTER.



Third party tested by ACM engineering & environmental services.

Plasmic-Powered Air Disinfection

Third Party Tested, Certified and Verified 97.2 % ASHRAE 241 corrected MS-2 efficiency at 60 minutes No ozone generation over a 24-hour period. **99.99%** H1N1 aerosol killing rate Laboratory test Natural bacteria in the air killing rate field test 98.05 Live SARs test, performed by



Watch our YouTube Promo Video

Safeguard your family with decade long protection.





Revive A Simple Clean Air Solution for homes





LEARN info@reviveaire.com MORE www.reviveaire.com



s buildings become increasingly airtight and energy-efficient, the risk of indoor air pollution rises. Despite standard ventilation and air filtration, indoor contaminants accumulate, posing health risks to occupants due to pathogens.

In the ever-evolving landscape of indoor air quality, Reviveaire introduces Aireshield, our state-of-the-art HVAC filtration solution. It interrupts the chain of airborne transmission between individuals, promoting healthier breathing.

Our groundbreaking technology also enhances particulate filtration by harnessing electrostatic forces within the plasma field. This process aggregates particles, improving the effectiveness of existing postfilters. For instance, a MERV8 filter could effectively perform at a MERV13 level due to this effect.

Aireshield seamlessly integrates advanced pathogen filtration into both residential and commercial HVAC systems. Its efficacy has been independently certified through rigorous third-party testing.



Conventional HVAC System with Aireshield



HVAC systems will increase the spread of aerosols within buildings without a pathogen mitigation strategy.

TEST RESULTS

INNOVATION BIOANALYSIS SARS-COV-2



resulting in 99.97% after 60 minutes as well as Omicron.

SARS SURROGATE INTERTEK REPORT

TEST PARAMETER (W FILTER)		TEST RESULT	NATURAL DECAY RESULT	UNITS
ORGANISM	SPECIES	COLIPHAGE ¢X174		
	ATCC N.	13706-B1		
	CHALLENGE CONCENTRATION	5.0 X 10°		PFU/mL
SAMPLES	0	TNTC (2628)	TNTC (2628)	PFU
	15	TNTC (2628)	TNTC (2628)	PFU
	30	TNTC (2628)	TNTC (2628)	PFU
	45	234	TNTC (2628)	PFU
	60	156	TNTC (2628)	PFU
	75	66	TNTC (2628)	PFU
	90	21	TNTC (2628)	PFU
	105	10	TNTC (2628)	PFU
	120	10	TNTC (2628)	PFU
RESULTS	-	99.6%		

Phi-X174, a surrogate for SARS-CoV-2, achieved an inactivity rate of 99.7% after 60 minutes in the test chamber.

S. EPIDERMIDIS BACTERIA INTERTEK

TEST PARAMETER (W FILTER)		TEST RESULT	NATURAL DECAY RESULT	UNITS
ORGANISM	SPECIES	S. Epidermidis		-
	ATCC N.	1228		-
	CHALLENGE CONCENTRATION	8.8 X 10 ⁸		CFU/mL
SAMPLE	S0	TNTC 2628)	TNTC (2628)	CFU
	15	TNTC 2628)	TNTC (2628)	CFU
	30	TNTC 2628)	TNTC (2628)	CFU
	45	218	TNTC (2628)	CFU
	60	177 TNTC (2628)		CFU
	75	111	TNTC (2628)	CFU
	90	108	TNTC (2628)	CFU
	105	76	TNTC (2628)	CFU
	120	59	TNTC (2628)	CFU
RESULTS		97.7%		

BACTERIA TESTED - S. Epidermidis kill rate of 97.7% after only 2 hours in the test chamber.

The Sustainable Solution For Airborne Pathogens

CERTIFIE

53803

SUSTAINABILITY

The Aireshield low static pressure design offers a lower electrical power draw, saving electricity costs.

The Aireshield does not require consumables, which means lower operating costs and no land fill. No handling of contaminated filters.

INSTALLATION AND MAINTENANCE

To wash a cleanable Non-Thermal Plasma Device (NTPD) device with water, begin by removing the device from its housing, disconnecting the power box, and inspecting it for any visible dirt or debris. Position the NTPD device on a stable surface outdoors or in a large sink and gently spray it with water, starting from the clean side and working our way to the dirty side to push contaminants out.Maintenance is easy; simply brush pins (with supplied tool) twice a year!

Regular maintenance like this ensures optimal air quality and efficient performance of your NTPD device system.

POWER REQUIREMENTS

The Aireshield is designed with universal inlet power: adaptable between 120 - 220 volts, 50/60 Hz.

The new or existing air handler power supply can power the Aireshield. Alternatively, the Aireshield can be connected to any 120v service outlet, and uses a maximum of 12 watts.

TYPICAL STATIC PRESSURE DROP	A. 199. 8	MODEL #	NOMINAL SIZES*			
100 FPM - 0.009" w.g.		AS-1224-1	12" x 24" x 1"			
200 FPM - 0.037" w.g.		AS-1625-1	16" x 25" x 1"			
300 FPM - 0.083" w.g.		AS-2020-1	20" x 20" x 1"			
400 FPM - 0.146" w.g.		AS-2025-1	20" x 25" x 1"			
500 FPM - 0.227" w.g.		AS-2424-1	24" x 24" x 1"			

The Aireshield is available in both standard and custom filter sizes.

* Nominal sizes in inches (HxWxD). Actual dimensions are 1/8" smaller than nominal dimensions



"HVAC systems will increase the spread of aerosols within homes without a pathogen mitigation strategy."

Third party tested for efficacy and safety.

Safeguarding your family's health effortlessly.

AGGLOMERATED BY CHARGED ATTRACTION:

CHARGED ATOMS ONCE THE IONS ATTACH TO THE PARTICLE, **OR MOLECULES** THE PARTICLE GROWS LARGER BY ATTRACTING NEARBY PARTICLES OF THE OPPOSITE POLARITY, THEREBY INCREASING THE FILTRATION EFFECTIVENESS. CHARGED ATOMS OR MOLECULES



BIOFILM EFFECTS ON COOLING COILS:



FIG 1: The presence of biofilms on the cooling coils of commercial air conditioning (AC) units [FIG 1] can significantly reduce the heat transfer efficiency of the coils and may lead to the aerosolization of microbes into occupied spaces of a building. © 2019 John Wiley & Sons A/S. Published by John Wiley & Sons Ltd.

SOURCE: HVAC Insider Jan 2020. https://hvacinsider.com/ new-cooling-coil-restorationprocess-delivers-measurable-savings/

FIG 2 & 3: to the left is a residential test install. The Aireshield filter was left (neglected) for two years without filter service. Notice the extreme amount of buildup on the center photo [FIG 2]. What was observed was, the coils preceding this filter where extremely clean [FIG 3], without a post filter. PHOTO SOURCE: Ellison Rd., Watchung NJ test install.

Ancillary benefits.