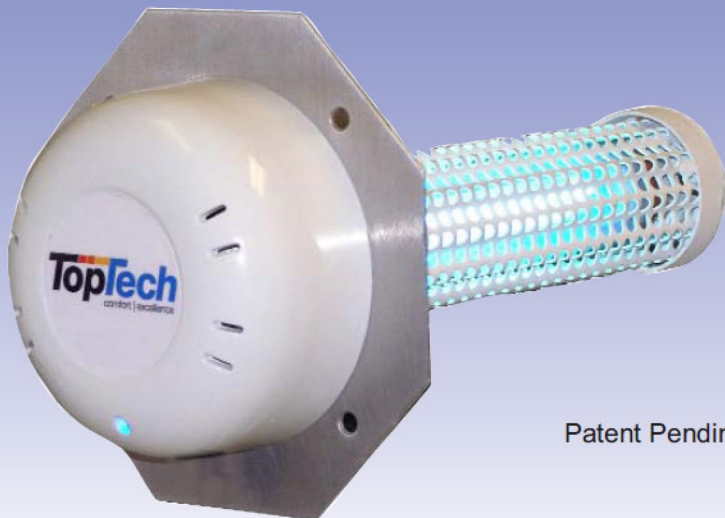


# Air Knight

**TopTech**  
comfort | excellence

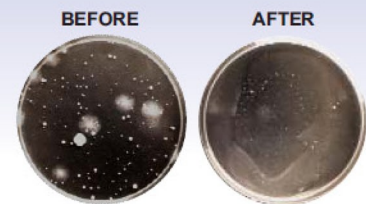
**TECHNOLOGY  
SERIES**

## Air Purification System A Photohydroionization™ (PHI) Technology

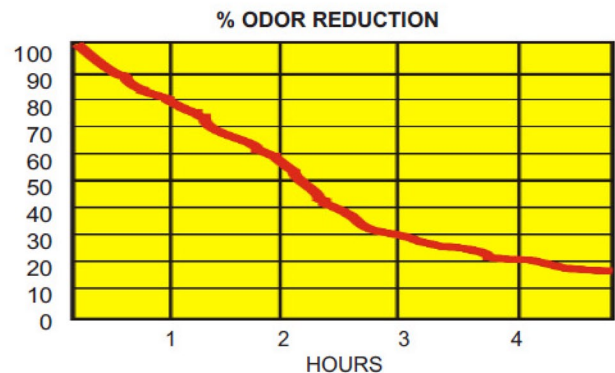
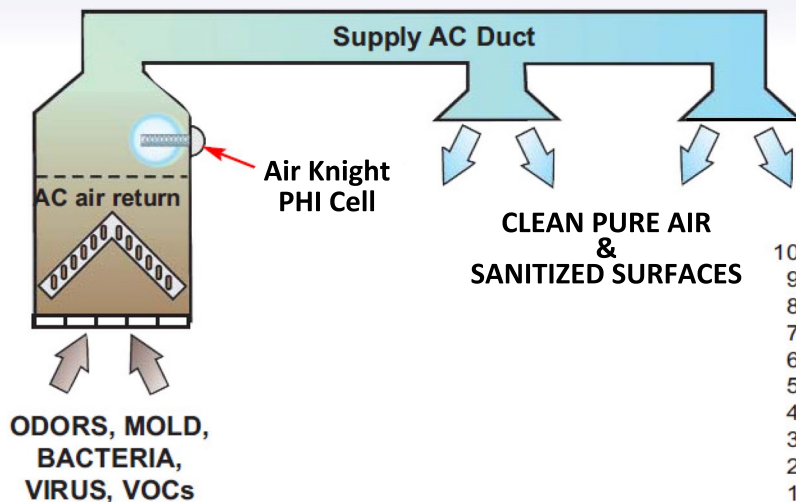


Patent Pending

The **Air Knight** is designed to eliminate sick building syndrome risks by reducing odors, air pollutants, VOCs (chemical odors), smoke, mold bacteria and viruses\*. The **Air Knight** Cells are easily mounted into air conditioning and heating systems air ducts where most sick building problems start. When the HVAC system is in operation the **Air Knight** Cell creates an Advanced Oxidation Process consisting of: Hydro-peroxides, super oxide ions and hydroxide ions. All are friendly oxidizers. By friendly oxidizers we mean oxidizers that revert back to oxygen and hydrogen after the oxidation of the pollutant.



Actual lab tests showing up to 97% reductions of airborne bacteria and mold



The combination of UV light enhanced by a hydrated quad-metallic compound target develops an advanced oxidation plasma. This process also produces hydro-peroxides, super oxide ions and hydroxides. By engineering the proper UV light wavelength, in combination with a triple function, no maintenance unit, The PHI Cell provides safe hydro-peroxides, super oxide ions and hydroxides to purify the air.

With the Air Knight-PHI Cell Advanced Oxidation System, micro-organisms can be reduced up to 99.99%. Gases, VOCs and odors can also be reduced significantly, and the room will have hydro-peroxides, super oxide ion and hydroxides which will help give your room fresh, clean and odor free air.

Item #	HVAC Air Blower Size	Dimensions	Ship Wt.	Replacement Cell
TT-AK249	1000-6000 CFM	9" probe / 5.5" Dia. Plate	3 lbs.	RGF-PHIC-9GA
TT-AK245	500-2000 CFM	5" probe / 5.5" Dia. Plate	3 lbs.	RGF-PHIC-5GA



Proudly Made In The USA

**2 year warranty on parts**



# Air Knight

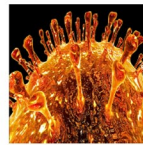
Enjoy Odor & Germ Free Air and Surfaces with the Air Knight from TopTech



**Reduces:**

**Bacteria**      **Mold**  
**Odors**        **Smoke**  
**Viruses**       **VOCs**

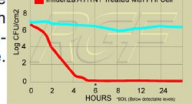
*Throughout your home using your existing Duct System*



### H1N1 (Swine Flu)

Kansas State University has completed preliminary testing on RGF's Photohydroionization (PHI-Cell®) and Reflective Electromagnetic Energy (REME® Cell) technologies with **99+% inactivation of H1N1 Swine Flu on a stainless steel surface**. Further tests are scheduled. 2009 H1N1 (referred to as "swine flu" early on) is a new influenza virus causing illness in people. This new virus was first detected in people in the United States in April 2009. This virus is spreading from person-to-person worldwide. On June 11, 2009, the World Health Organization (WHO) signaled that a pandemic of 2009 H1N1 flu was underway. Spread of 2009 H1N1 virus is thought to occur in the same way that seasonal flu spreads. Flu viruses are spread mainly from person to person through coughing or sneezing by people with influenza. Sometimes people may become infected by touching items – such as a surface or object – with flu viruses on it and then touching their mouth or nose.

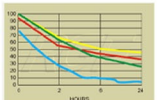
Tested by Kansas State University Inactivation Rate **99+%**



### Odors

The purpose of this test was to evaluate to what effect the RGF's AOT unit has on cleaning chemicals, pet odors, smoke and perfume odors. This test was performed utilizing two 500 cubic foot test chambers and a ten-person odor panel. The qualitative assessments of the ten-person odor panel were then used as a means to determine the odor reduction. Tested by C&W Engineering (Independent PE Firm)

Reduction %  
 Cleaning chemicals 55+%, Pet odors 72%, Perfume odors 63+%, Smoke odors 70%

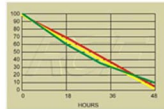


### Mold/Yeast

The purpose of this test was to evaluate the effect the RGF AOT unit has on mold/yeast bacteria (TPC). This test was performed utilizing a standard 2000 sq. ft. home and 3000 sq. ft. simulated home.

Tested by California Microbiology Center  
 Independent Accredited Lab - IBR  
 Kansas State University  
 University of Florida  
 United States Air Force  
 R&D Labs  
 C&W Engineering  
 University of Cincinnati  
 Kane Regional Hospital

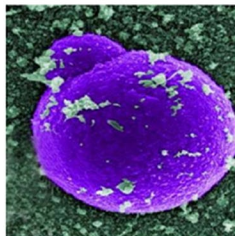
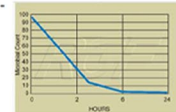
Reduction %  
 Bacteria 99%  
 Mold 97- 98%  
 Yeast 90+%



### Methicillin Resistant Staphylococcus aureus

Methicillin-resistant *Staphylococcus aureus* (MRSA) is a type of bacteria that is resistant to certain antibiotics. These antibiotics include methicillin and other more common antibiotics such as oxacillin, penicillin and amoxicillin. Staph infections, including MRSA, occur most frequently among persons in hospitals and healthcare facilities (such as nursing homes and dialysis centers) who have weakened immune systems. Source: CDC Centers for Disease Control and Prevention

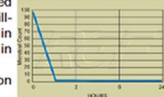
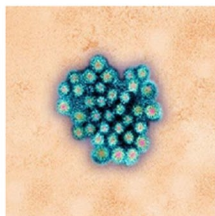
Tested by Kansas State University Inactivation Rate **99+%**



### Norwalk Virus

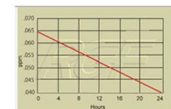
Noroviruses are a group of related, single-stranded RNA, nonenveloped viruses that cause acute gastroenteritis in humans. Noroviruses are named after the original strain "Norwalk virus," which caused an outbreak of gastroenteritis in a school in Norwalk, Ohio, in 1968. No evidence suggests that infection occurs through the respiratory system. Noroviruses are highly contagious and as few as 10 viral particles may be sufficient to infect an individual. During outbreaks of norovirus, several modes of transmission have been documented; for example, initial food-borne transmission in a restaurant, followed by secondary person-to-person transmission to household contacts. 50% of all food-borne outbreaks of gastroenteritis can be attributed to noroviruses. Among the 232 outbreaks of norovirus illness reported to CDC from 1997 to 2000 36% were in restaurants, 23% were in nursing homes, 13% were in schools and 10% were vacation settings or cruise ships. Source: CDC-Centers for Disease Control and Prevention

Tested by Midwest Research Institute Inactivation Rate **99+%**

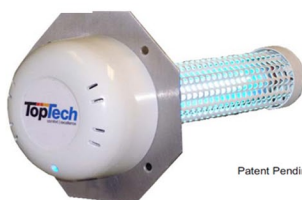


### Formaldehyde

The purpose of this test was to evaluate the effect the RGF AOT unit has on formaldehyde in a home. Tests were conducted in actual mobile homes for FEMA.



Air Knights' Advanced Photo-Hydro-Ionization Technology provided and built by RGF Environmental Group, Inc.



Patent Pending

Air Knight featured by: