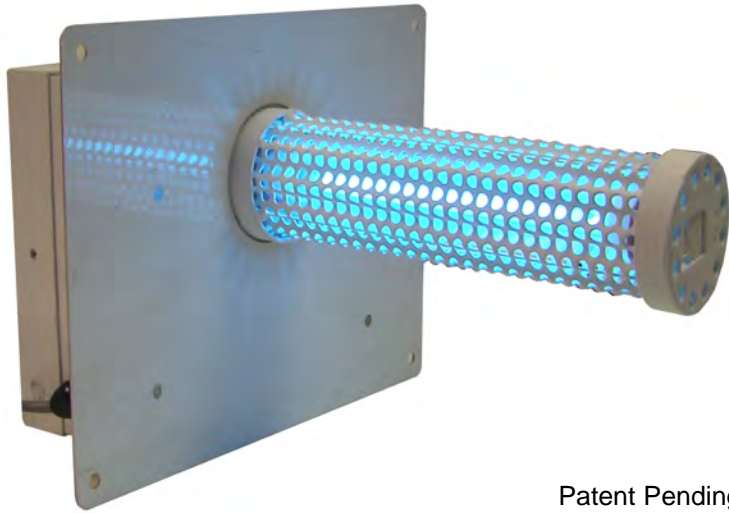




**ENVIRONMENTAL**

## Light Commercial AC/Heat Duct Air Purification System A Photohydroionization™ (PHI) Technology

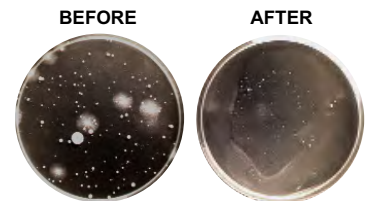
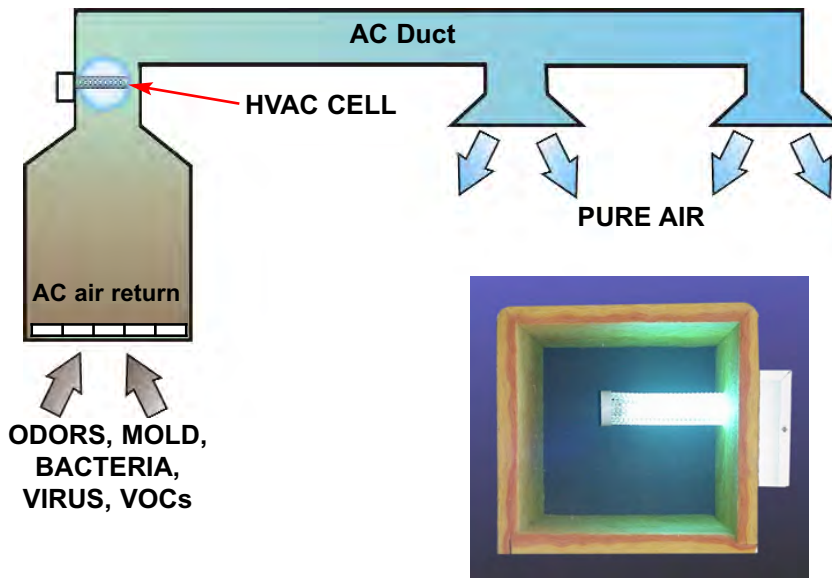


Patent Pending

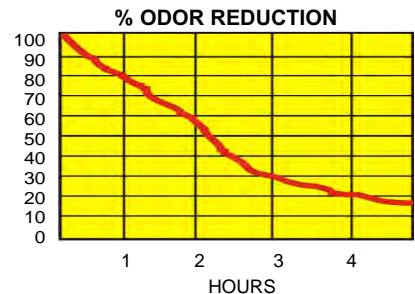
The HVAC PHI Cell by RGF® is designed to eliminate sick building syndrome risks by reducing odors, air pollutants, VOCs (chemical odors), smoke, mold bacteria and viruses\*. The HVAC-PHI Cells are easily mounted into air conditioning and heating systems air ducts where most sick building problems start. When the HVAC system is in operation the HVAC-PHI Cell creates an Advanced Oxidation Process consisting of: Hydro-peroxides, ozonide ions, 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. These oxidizers and the UV energy kill microbes in the HVAC unit and also throughout the room at the source of contamination

### Why Use RGF's Photohydroionization™ Technology ?

Germicidal UV light rays have been used for decades by the medical industry as a method for destroying micro-organisms (germs, viruses, bacteria). UV light is dependable and can be easily installed in HVAC ducts or a plenum. Germicidal UV light is effective in reducing only the airborne micro-organisms that pass directly through the light rays. However, germicidal UV light has little to no effect on gases, vapors or odors. Photohydroionization Advanced Oxidation, on the other hand, is very effective on gases, vapors, VOCs and odors in the room at the source of contamination.



Actual lab tests showing up to 90% reductions of airborne bacteria and mold

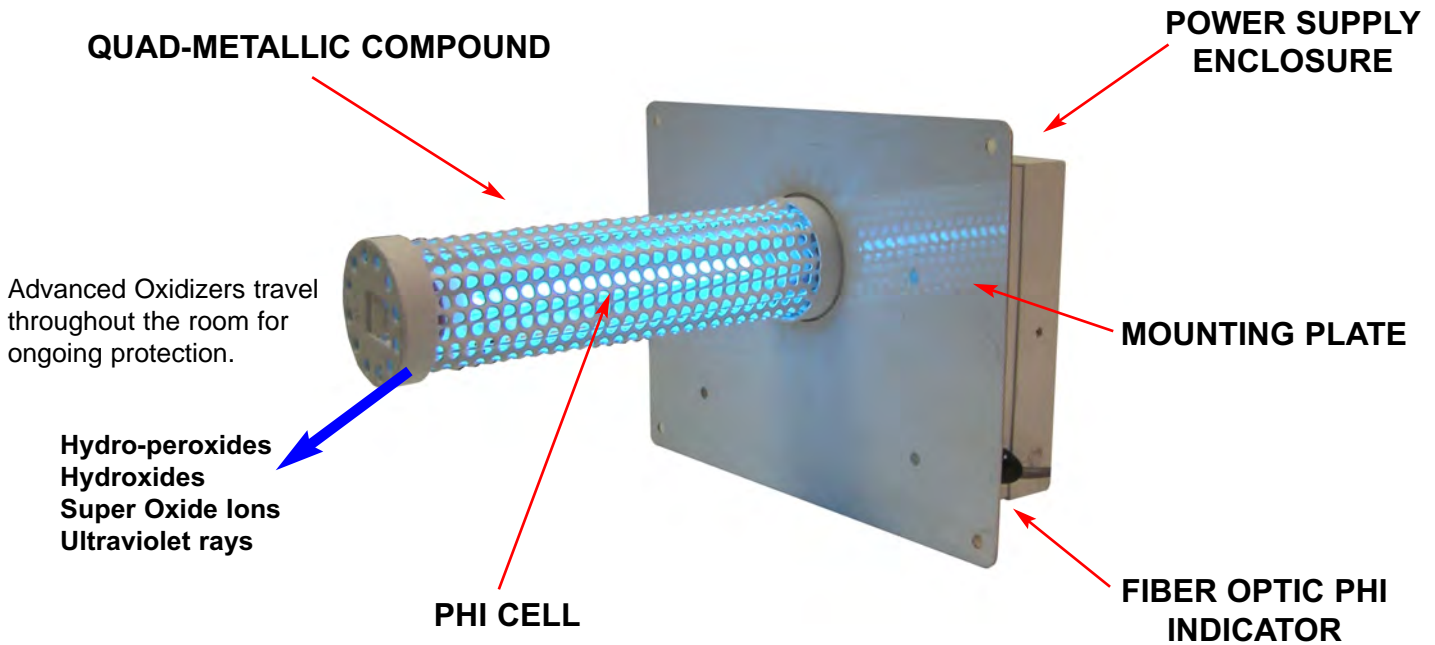


UV light enhanced by a hydrated quad-metallic compound target develops an advanced oxidation reaction that creates an Advanced Oxidation Process. This process also produces hydro-peroxides, super oxide ions and hydroxides. By engineering the proper UV light wavelength, in combination with a triple function,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

With the RGF HVAC-PHI Cell Advanced Oxidation System, micro-organisms can be reduced by over 95%. 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.

\*UV and Hydro-peroxides are recorded as effective in killing viruses however RGF has not performed clinical tests on viruses as there are thousands of strains

## LIGHT COMMERCIAL PHI CELL



•Hydro-peroxides distribution:	distributed thru air handler
•Super Oxide Ion distribution:	distributed thru air handler
•Hydroxide Ion distribution:	distributed thru air handler
•Installation:	installed in hvac duct or plenum
•Electrical:	220 VAC 60 Hz 50-90 watts
•Materials:	Stainless steel housing
•PHI Cell Replacement	Recommended after 25,000 hrs

The **RGF PHI Cell** unit size is scaled to accommodate the various air flow rates of different HVAC systems. Locate the air blower size in cubic feet per minute (SCFM) of the HVAC system you are intending to install the system in, then pick the model number that corresponds to that flow rate. **Note:** It is recommended these units be installed by a licensed electrician.

Item #	HVAC Air Blower Size	Dimensions	Ship Wt.	Replacement Cell#
LC-14HO-GA-26	18,000 to 26,000 CFM	14" probe / 9"x9" plate	3 lbs.	PHIC-14C

### RGF Environmental Group, Inc.

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