Thank you for purchasing the REME™ + by RGF® Environmental Group, Inc. We are confident this system will provide you with years of Fresh, Clean and Odor-Free Air!!!

NOTE: Please take time to read the attached assembly instructions. All instructions and precautions should be adhered to while operating this system.

RGF® Environmental Group
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The REME™+ by RGF®

The REME™+ by RGF® Environmental Group is designed to help eliminate sick building syndrome risks by reducing odors, air pollutants, VOCs (chemical odors), smoke, mold, bacteria and viruses. The HVAC REME™ units are easily mounted into existing air conditioning and heating system air ducts where most sick building problems start. When the HVAC system is in operation the HVAC-REME™+ cell creates an Advanced Oxidation Process consisting of: Ionized Hydro-peroxides, superoxide 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.

Typical Installation

**REME™ Cell Features**

![Diagram of REME™ Cell Features](image)

- Catalytic Coating
- Electronic Housing
- UV-IR Long Life Cell
- Silent Plasma Propulsion Module (SPPM™)
- Ducts
- Guardian Air REME™
- Remote Power Supply
- Bacteria, Mold and Virus
- Aggressive Charged Advanced Oxidation Purifiers

Figure 2
Your kit contains the following:

- Guardian Air REME™ HVAC unit with adhesive backed mounting plate
- Remote mounted switching power supply (Input: 100-240 Volts AC, Output: 12 VDC)
- Adhesive backed foil mounting ring
- Four (4) mounting screws
- Instructions and warranty card

NOTE: DO NOT USE UNIT IF POWER CORD IS DAMAGED.
PLUG MUST BE ACCESSIBLE AT ALL TIMES.

INSTALLATION INSTRUCTIONS:

1. Determine the Mounting Location:
   - To maximize the effectiveness of the Guardian Air REME™ Cell it is recommended to install the Guardian Air REME™ unit in the air plenum just after the air handling unit (supply side), refer to Figure 1 for clarification.
   - As drilling/cutting holes into the duct are required, it is recommended to install the Guardian Air REME™ unit outside any existing HVAC air handling unit (this will prevent any possible damages to the HVAC unit during the installation process).
   - When locating the unit, always allow for positioning near a suitable power source (i.e., When using a standard 120 volt source, be sure to position the unit in close proximity to an existing outlet).
   - Once a suitable location is determined, position the Guardian Air REME™ midway in your air duct (make sure you have allowed enough room to accommodate the 5-1/2" round mounting plate when finalizing your mounting position). Be sure to position the unit so that the embossed arrow on the mounting plate is pointed in the direction of the air flow within the duct.

CAUTION: NEVER DISASSEMBLE A REME UNIT WHILE IT IS CONNECTED TO POWER. THIS DEVICE PRODUCES BROAD SPECTRUM UV LIGHT AND WILL CAUSE DAMAGE TO EYES.
- Using a 3.25\text{\textdegree} hole saw (or other suitable means) cut a 3.25\text{\textdegree} hole into the plenum / duct box. Cutting into fiberboard is usually easier than metal, and can typically be done with a utility knife (Figure 3). Be sure you are drilling into the ductwork only and not penetrating into the mechanical areas of your HVAC system.

![Figure 3]

2. Mounting Unit:

- Secure the mounting plate to the air duct by first peeling the paper backing off the self-adhesive sealing ring affixed to the back side of the mounting plate (be sure the mating area of the duct surface is flat, clean and dry), refer to Figure 4.

![Figure 4]
• Insert probe into opening with the arrow indicator going in the same direction as the airflow of the hvac unit. Once attached to duct, press firmly all around flange to ensure a proper seal, refer to Figure 5.

![Figure 5](image)

In some installations it may be preferred to leave the adhesive paper backing on (older metal ducts or on rough surfaces), and secure the unit with the screws (provided) via the four mounting holes located on the Guardian Air REME™ units mounting plate, refer to Figure 6.

![Figure 6](image)
• Once unit is secured, apply the foil sealing ring to ensure an airtight seal. Remove the paper backing, center over unit, smooth and press firmly over entire surface to ensure a good seal (make sure corresponding sealing surface is clean and dry), refer to Figure 7.

3. Electrical Connection:

• The Guardian Air unit comes standard with 100-240 VAC 50/60 Hz transformer. This transformer comes with an input connection that is a standard 3 prong 120 VAC plug (US). The output wiring terminates with a male 12 VDC jack, which connects directly to the Guardian Air unit.

• RGF recommends for optimal performance and maximum cell life that the Guardian Air product operate continuously with the fan running. This can be accomplished by either plugging the power supply into the EAC outlet on the air handling unit or plugging the power supply into an external duplex outlet.

• Mount the transformer with the provided 4 mounting screws near the Guardian Air units as well as a suitable electrical outlet, see Figure 7.
• Note: The Guardian Air unit comes complete with a standard 120 volt US wall plug. However, the switching power supply shown in Figure 7 is capable of using any input voltage between 100 to 240 volts AC (50/60 Hz). It is highly recommended that when installation requirements dictate using an input voltage other than the standard 120 volt wall plug, that these connections be performed by a licensed, qualified electrician or HVAC contractor.

• Connect the switching power supply output line (12 VDC) to the Guardian Air unit by inserting the male barrel connector into the DC jack located on the lower side of the Guardian Air housing (6 o’clock position). Once fully inserted, twist the connector ¼ turn to lock in place.

• Plug in the power supply to the 120 volt wall outlet with the provided cord, the installation is now complete. For installations with other voltages requirements, please have your licensed electrician or HVAC installer connect the power and energize the unit.

4. Particle Collector:

• If your unit came with the optional particle collector, this must be sized by your HVAC contractor to ensure a proper fit into your existing HVAC filter frame holder.

• Once sized, the installer would connect the green grounding wire to a suitable grounded surface (if already properly grounded, the filter holder frame or the HVAC housing are suitable). This ground bonding is critical to optimize the performance of the collector, and should be determined by the installer.

• Once installed, the collector will need to be cleaned on a regular basis (determined by the loading levels in your particular environment). It is recommended that the collector be inspected monthly until the proper cleaning interval is determined.

• To clean the collector, simply disconnect the press together wire terminal for the collector ground, and remove the collector from the frame in the same manner as a standard type HVAC filter.

• Once removed the collector may be vacuumed with a shop-vac type vacuum, or cleaned with a garden hose (a mild washing detergent solution may also be used).

• Once cleaned (and if washed, then dried), replace the collector in the same location in your HVAC filter frame, and then reconnect the bonding terminal.

Replacing REME™ Cell:
BEFORE CHANGING REME CELL COMPLETELY DISCONNECT FROM POWER

- Remove unit from duct: Unscrew four mounting screws (if used), cut aluminum sealing ring, and then gently pry away from surface of duct. If mounting adhesive was used, slowly separate mounting plate from duct surface by breaking the adhesive seal with a thin flat object such as a metal putty knife.

- With the Guardian Air REME™ Assembly removed, remove four (4) Philips screws from back of mounting plate and remove the domed housing (if adhesive sealing ring was used, this will need to be scraped away with a putty knife to reveal screws).

- Once housing is free from mounting plate, carefully free connector from REME™ Cell.
- Firmly grip connector and with a gentle rocking motion remove connector from cell pins.

- Remove three (3) Phillips screw attaching REME™ Cell to mounting plate.

- Replace with new REME™ Cell and reassemble unit.
FAQ (Frequently Asked Questions):

Q. Is it O.K. to run the unit all the time, or is it better to cycle with the fan?
A. The Guardian Air unit treats your home when the HVAC unit fan is on, it is recommended to leave your fan on continually when possible to provide maximum benefit. However, cycling the unit on and off with the fan is acceptable, but be aware that excessive repeated cycling may degrade the useful life of the cell elements, RGF recommends running the unit continuously.

Q. Can the unit be installed on the return air side of the HVAC?
A. The best location for your Guardian Air unit is in the plenum, just after the air handler. This allows for full distribution and extended air treatment. In situations were it is somehow impossible to locate the unit after the HVAC unit, it is acceptable to locate the Guardian Air unit before the HVAC unit, however the high moisture content of the cooling coils, as well as the high temp of the heating coils will reduce the effective treatment capacity of the unit.

Q. If the Blue Indicator lamp is not illuminated, is my REME™ cell not working properly?
A. In some instances that may be the case, however, it could also mean that the unit just needs to be reset. To do this, simple unplug the 12 volt power cord from the unit, wait five seconds, and then re-install.

Q. After two years my Guardian Air unit indicator light still glows blue, so it is still working right?
A. The blue indicator light does in fact let you know if the unit is operating or not. However, it does not indicate the relative output of the unit. The output of the unit reduces with time, and after two years of operation, it is recommended to change out the replaceable REME™ cell insert to maintain optimum effectiveness of the unit.
LIMITED WARRANTY

This warranty supersedes and replaces any warranty statements made orally by the Sales Person, Distributor, or Dealer, or contained in the written instructions or other brochures or informational documents related to this product.

Manufacturer warrants the new *Guardian Air by RGF®* equipment to be free from defects in material and workmanship under normal use and service when operated and maintained in strict accordance with manufacturer’s instructions for a period of twenty four (24) months from the date of receipt of equipment.

Manufacturer’s obligation under this warranty is limited to repairing or replacing any part found to its satisfaction to be so defective. The manufacturer at its discretion may replace / exchange the defective unit up to 90 days from the date purchase. Hereafter it will need to be returned under a Returned Materials Authorization (RMA) for review and or repair (if found defective). This warranty does not cover parts damaged by decomposition from chemical action or wear caused by abrasive materials, nor does it cover damage resulting from misuse, abuse, or any other than its intended use, accident, neglect, or from improper operation, maintenance, installation, modification or adjustments.

THERE ARE NO WARRANTIES WHICH EXTEND BEYOND THE DESCRIPTION ON THE FACE HEREOF.

To obtain warranty service and return authorization number, contact your supplier.

Include a copy of your Bill of Sale, Invoice or Receipt of Purchase, with an explanation of the problem or defect.

Hg- LAMP CONTAINS MERCURY Manage in accord with disposal laws. See: www.lamprecycle.org
LIMITED WARRANTY COMMON QUESTIONS

How long is the warranty?

- For two (2) years from initial purchase date.

How do I contact the Manufacturer about my warranty, a question or complaint?

- Your local Sales Representative may answer a question or complaint.
- If they cannot answer the warranty question or complaint, you can contact your local supplier and request the warranty department.

Are there any parts not covered by this warranty (that the manufacturer will not repair or replace)?

- Yes. Parts damaged by decomposition from chemical action, humidity, moisture, or wear caused by abrasive materials. It does not cover damage resulting from misuse, abuse, or any other use other than its intended use. This warranty does not cover accident, neglect, or from improper operation, maintenance, installation, modification or adjustments.
- Parts not made by Manufacturer. However your supplier will process the claim with the other manufacturer.

What do I do in the event the equipment is damaged in shipping?

- Immediately upon receipt of the unit, you as the purchaser should inspect the unit and test it to make sure it is operational.
- If there is visible damage to the equipment:
  1. Notify the carrier shipping office immediately and write on the Bill of Lading the visible damage or part(s), which are broken or missing.
  2. Call your local supplier immediately to specify the damage.
  3. Your supplier should refund the unit at the suppliers cost.
  4. Your unit will be replaced or repaired as soon as possible.
What if I find damage to the equipment after the carrier leaves?

- Claims for concealed shipping damage must be reported to the carrier and a copy sent to your supplier in writing via telefax or certified U.S. Mail within fifteen (15) days from the date of delivery.

  Note: Please take note that the carrier will not cover the damages if these steps are not adhered to.

Steps to take when you have determined that your equipment is malfunctioning within the warranty period.

- Call your distributor and notify them of the problem or malfunction.
- If it is determined that a part is malfunctioning due to a defect, ship unit to your supplier or call supplier for other means of return. The Equipment Warranty Form should be completed and included.
- Your supplier will repair or exchange the defective unit with a working replacement.

Things I should do to avoid problems or injuries when running my GUARDIAN AIR Equipment.

- Thoroughly read and understand all Operating Instructions, Warnings and Precautions before commencing application.

What service can I expect from my distributor?

- Your distributor will assist you with any problems or questions you may have.
- Sell you optional parts or equipment as needed.
- Assist you with any warranty problems and provide you with a Warranty Request Form (which is required when sending a warranty unit back to the manufacturer for repair or replacement).
Other RGF® Advanced Oxidation Products

The Guardian Air Plug In provides bacteria, mold, odor and VOCs (chemical odors) reduction. The advantage of the Guardian Air Plug In is its ability to be used in any room and be completely inconspicuous. The Guardian Air Plug In plugs directly into a wall outlet and can be used with or without its internal fan. Because it has its own outlets as part of the unit, you do not lose the wall outlet. The Guardian Air Plug In is an air treatment system not a filter.

The RGF® - IMSB is designed for use on ice machine small compactors and holding tanks. The unit utilizes the PHI Cell to create hydroperoxides, super oxide ions, and hydroxides. The additional oxidizers provide a broader range of applications and redundant oxidation gases.

The Guardian Air 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, 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.

The Mini PHI Cell by RGF® features the same technology as the Guardian Air but is designed to fit into smaller HVAC systems such as PTACS FAN coils and unit ventilators.

Turbozone is designed to provide ozone and advanced oxidation gases for commercial air purification and odor destruction. This unit is fully automatic, easy to use. The Turbozone destroys odor molecules and leaves no residue. This product has been engineered, designed, built, tested and thousands retailed. The Turbozone will destroy, not just cover up, the following airborne substances: smoke, mold, bacteria, viruses, VOCs, pollen and many more. Housed in a light weight heavy duty stainless steel case the 1000 is designed for small to medium commercial jobs. Not to be used in occupied spaces.