RGF's nine acre enviro-compound located in Riviera Beach (Port of Palm Beach Enterprise Zone) Florida

About RGF Environmental Group, Inc.

RGF manufactures over 500 environmental products and has a 35+ year history of providing the world with the safest air, water, and food without the use of chemicals. RGF is an ISO 9001:2015 certified research and innovation company, holding numerous patents for air purifying devices, food sanitation systems and wastewater treatment systems. Situated in the heart of the Port of Palm Beach Enterprise Zone, RGF Headquarters span nine acres, with over 130,000 square feet of totally vertical and environmentally friendly manufacturing, warehouse and office facilities allowing the company to provide the highest quality and best engineered products on the market.

Scan to take the RGF Fun Tour.

RGF® Environmental Group, Inc.
ISO 9001:2015 CERTIFIED COMPANY
1101 West 13th Street (Port of Palm Beach Enterprise Zone) Riviera Beach, Florida 33404
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PRD-RL-MAN-1019 Rev B **REME LED 24VAC 3-2020**

HALO•LED™

With REME-LED™ Technology

Whole Home Air Purification

Please take time to read these instructions.
All instructions and precautions should be adhered to while operating this unit. Non-compliance with these installation and operating instructions voids the warranty.

Scan to watch video

Approved for sale in California

INTERTEK SUSTAINABILITY
VERIFIED
ZERO OZONE
DOES NOT EMIT MORE THAN 0.005PPM AS TESTED PER UL 867

The HALO-LED™ by RGF

Thank you for purchasing the HALO-LED™ by RGF Environmental Group, Inc. The HALO-LED™ is the industry's first LED in-duct, whole home air purification system that is both mercury free and zero ozone compliant. The HALO-LED™ proactively treats every cubic inch of air-conditioned space, thereby reducing airborne and surface microbials, bacteria, viruses, mold, smoke and VOCs. Leveraging bi-polar ionization the HALO-LED™ provides the added benefit of reducing airborne allergens, dust and particulates. The new patent pending technology utilizes an exclusive hybrid hydrophilic washable ceramic catalyst and is powered by a proprietary low energy, ultra-long-life, LED array. By combining REME-LED™ UV technology along with RGF's proven PHI-CELL® and REME technologies, the HALO-LED™ provides revolutionary indoor air purification.

HALO-LED™

Figure 1

Typical Installation

Figure 2

TEMPLATE

Remove page and tape to duct work where unit will be installed.
Using suitable tool cut through template and duct work.

Scan for relay instructions

Scan for air switch instructions

HOUSING CONTAINS EXPOSED NON-METALLIC MATERIALS SUITABLE FOR AIR-HANDLING INSTALLATIONS

MATÉRIAUX NON MÉTALLIQUES EXPOSÉS POUVANT ÊTRE UTILISÉS DANS DES ESPACES DE TRAITEMENT DE L´AIR.

MICROCON® 600

Whole Home HEPA System

By RGF Environmental Group, Inc.

The Microcon® 600 is a versatile, efficient HEPA air cleaner designed for whole home air purification that removes 99.97% of airborne contaminants from the air conditioned space. It is designed to be easily adapted to existing heating and air conditioning systems using standard HVAC components.

Features:

- Can be used with existing HVAC systems
- Mounting provisions for the all new HALO-LED™
- Whisper-quiet operation
- Low maintenance HEPA
- Change filter indicator light
- No effect on static pressure
- Durable galvalume steel with PVDF coating
- Energy efficient and environmentally friendly

Specifications:

Color:	White
Dimensions:	15.75" W x 27.5" H
Motor/Fan:	Designed for continuous operation
Coverage:	5,000 sq. ft.
Inlet:	8" Duct collar
Outlet:	8" Duct collar
Weight:	33 lbs.
Air Flow:	600 cfm
Power Usage:	225 watts

HALO-LED™ INSTALLATION INSTRUCTIONS

NEVER EXPOSE UNPROTECTED EYES OR SKIN TO ULTRAVIOLET LIGHT.
NE JEMAIS EXPOSER LES YEUX OU LA PEAU SANS PROTECTION AUX RAYONS ULTRAVIOLETS

Your box contains the following:

- HALO-LED™ unit
- Adhesive backed foam gasket and aluminum sealing ring
- Three (3) mounting screws
- Six (6) wire nuts
- Instructions and Warranty Registration Card
- Caution UV Light In Use decal
- 24 VAC transformer
- Relay

NOTICE TO INSTALLER & HOMEOWNER

This unit MUST be installed and wired to cycle on/off with the blower. This installation is required in order to be in compliance with new safety standards and to ensure maximum energy efficiency and LED module service life.

FOR DRY LOCATIONS ONLY
EMPLACEMENTS SEC SEULEMENT

SUITABLE FOR USE IN AIR-HANDLING UNITS
ADAPTÉ À UNE UTILISATION DE TRAITEMENT DE L´AIR

INSTALLATION INSTRUCTIONS

1. Mounting Location:

- To maximize the effectiveness of the HALO-LED™, it is recommended, whenever possible, to install the HALO-LED™ unit in the air plenum just after the air handling unit (supply side). Refer to Figure 2.
- Locate the unit in the plenum/duct box AFTER the fan. Position it near a suitable power source with enough room to accommodate the mounting plate.
- Once a suitable location is determined, position the HALO-LED™ unit midway in the air duct.

2. Mounting Unit:

Figure 3

- Using a 4-1/2" hole saw, or the provided template, cut a hole into the plenum/duct box. Cutting into fiberboard is usually easier than metal, and can be done with a utility knife. Refer to Figure 3. Be sure to drill into the duct only. Do not penetrate into the mechanical areas of the HVAC system.

Figure 4

- Be sure the mating area of the duct surface is clean and dry. Secure the mounting plate to the duct by first peeling the paper backing off the self/adhesive sealing ring affixed to the back side of the mounting plate. Refer to Figure 4.

FREQUENTLY ASKED QUESTIONS

Why should I register the warranty?

Registering the unit with the Manufacturer extends the warranty from (5) five years to (7) seven years.

Register warranty online at www.rgf.com/registration to receive two (2) extra years of warranty protection.

How long is the warranty?

Four (4) years for the cell from the original date of purchase.

Unregistered unit: Five (5) years for the unit from the original date of purchase.

Registered unit: Seven (7) years for the unit from the original date of purchase.

Who do I contact about the warranty or if I have a question about the unit?

First, contact your local HVAC contractor to answer the question and verify your warranty.

If they cannot answer the question or verify your warranty, you can contact the RGF Customer Service department at requests@rgf.com.

Are there any limits to the warranty? Yes.

Yes, please refer to the Limited Warranty for full details.

What should I do to avoid problems or injuries when running my HALO-LED unit?

Thoroughly read and understand all installation instructions, warnings and precautions before use.

Is it OK to run the unit all the time? No.

No. This unit MUST be installed and wired in parallel with the blower to cycle on/off with the blower. This installation is required in order to be in compliance with new safety standards and to ensure maximum energy efficiency and LED module service life.

Can the unit be installed on the return air side of the HVAC? Yes, but..

Yes, but the best location for your HALO-LED unit is in the plenum just after the air handler. This allows for full distribution and extended air treatment. In situations where it is impossible to locate the unit after the air handler, it is acceptable to locate the HALO-LED unit before the air handler; however, the high moisture content of the cooling coils and the high temp of the heating coils will reduce the effective treatment capacity of the unit.

FIVE + TWO YEAR 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 HALO-LED™ unit to be free from defects in material and workmanship under normal use and service when operated and maintained in accordance with manufacturer's instructions for a period of five years (sixty months) from the original date of purchase (excluding the LED cell). The warranty is extended an additional two years (24 months), for a total of seven years (84 months), if the unit is registered (excluding the LED cell). The HALO-LED™ cell included with the original unit is warrantied to be free from defects in material and workmanship for a period of four years (48 months) from original date of purchase.

International purchases are warrantied for twelve (12) months from original date of purchase. Parts only. Shipping not included.

For the warranty period, the manufacturer offers an immediate over-the-counter exchange for a demonstrated defective unit. The company making this exchange, and requesting credit for said unit is obligated to verify that the unit or LED cell is in fact defective. The unit will need to be returned to the manufacturer 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, humidity, moisture, or wear caused by abrasive materials;
- Damage resulting from misuse, abuse, or any other use other than its intended use;
- Improper operation, maintenance, installation, modification or adjustments;
- Parts not made by manufacturer are not warrantied.

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

NOTE TO CONTRACTOR
TO OBTAIN WARRANTY SERVICE AND RETURN AUTHORIZATION NUMBER, CONTACT YOUR SUPPLIER. INCLUDE A COPY OF THE BILL OF SALE, INVOICE OR RECEIPT OF PURCHASE. WITH AN EXPLANATION OF THE PROBLEM OR DEFECT.

Figure 5

- Insert unit 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 the flange to ensure a proper seal. Refer to Figure 5. In some installations, it may be preferred to secure the unit with the provided screws via the three mounting holes located on the HALO-LED™ mounting plate.

Figure 6

- Once the unit is secure, apply the aluminum sealing ring or comparable tape in compliance with local codes. To ensure an airtight seal make sure the corresponding sealing surface is clean and dry. Remove the paper backing, center over unit, smooth and press firmly over entire surface to ensure a good seal. Refer to Figure 6.

NOTE: BE SURE TO AFFIX CAUTION DECAL NEXT TO MOUNTED UNIT.

3. Electrical Connections:

NOTICE TO INSTALLER & HOMEOWNER

This unit MUST be installed and wired to cycle on/off with the blower. This installation is required in order to be in compliance with new safety standards and to ensure maximum energy efficiency and LED module service life.

The HALO-LED™ is powered using the supplied 40VA transformer. The transformer is designed to be wired in 3 different ways depending on the type of fan in the HVAC unit:

1. For single stage fans, the transformer may be connected in parallel to the incoming power of the blower. See Figure 7.
2. For variable speed fans without communicating thermostats, the enclosed relay may be used. For wiring instructions visit: www.rgf.com/relay-switch-instructions **Go to page 10 for QR link**
3. For variable speed fans with communicating thermostats, the output of transformer may be connected through the optional air sensing switch in the RGF Installation Kit (HLED-AS). For wiring instructions visit: www.rgf.com/rgf-air-sensing-switch-kit **Go to page 10 for QR link**

- Make sure the transformer is installed in accordance with all applicable local codes by a qualified installer.
- Use the provided wire splices for the electrical connections (ensure any connections used conform to local codes). Refer to the label on the included transformer box for the correct voltage connections.

Figure 7

THIS EQUIPMENT MUST ONLY BE INSTALLED BY A QUALIFIED INSTALLER.

CET ÉQUIPEMENT DOIT ÊTRE INSTALLÉ UNIQUEMENT PAR UN INSTALLATEUR QUALIFIÉ.

CAUTION: ENSURE THAT THE 24V TRANSFORMER PROVIDES AT LEAST 700mA FOR EACH UNIT INSTALLED ON THE CIRCUT

ATTENTION: ASSUREZ-VOUS QUE LE TRANSFORMATEUR 24V FOURNIT AU MOINS 700MA À CHAQUE APPAREIL INSTALLÉ SUR LE CIRCUIT.

MAINTENANCE OF THE CERAMIC CATALYST

In high smoke and particulate load environments it is recommended to clean the ceramic catalyst every six (6) months.

Figure 8

- Remove the brass thumb screw which holds the ceramic catalyst. Refer to Figure 8.

Figure 9

- Slide out the ceramic catalyst assembly. Refer to Figure 9.
- The individual ceramic catalyst matrixes can be removed from the assembly and washed with warm water and a mild detergent. In environments such as heavy smoking rooms the ceramic can be immersed in boiling water for several minutes.
- **Be sure each ceramic catalyst matrix is completely dry before reassembling and returning to the HALO-LED™ unit.**