



By **RGF**®

WE ARE RGF®

# Microcon™ X Radioactive Fallout Air Purification System

Radioactive fallout is the tiny, invisible airborne particles or dust that are produced when a nuclear explosion or accident occurs. These particles can carry radioactive materials, which means they emit harmful radiation. When these particles settle on the ground or inside our buildings, they can contaminate the environment and pose serious health risks if they are inhaled, ingested, or come into contact with the skin.

RGF Environmental's MC-X filter provides a comprehensive air treatment solution helping to reduce exposure to airborne radioactive particles and gases in our living spaces. Microcon™ X employs an effective two stage filtration and adsorption process which adheres to International Atomic Energy Agency (IAEA) and US Department of Energy guidelines<sup>1,2,3,4</sup>.



PRE-FILTER



HEPA



RADIATION  
FILTER



ACTIVATED  
CARBON



CIRCULATION



WHOLE  
HOME



**RGF**®  
ENVIRONMENTAL GROUP, INC.

TO LEARN MORE, VISIT: [RGF.COM](http://RGF.COM)

## Why Use RGF's Two Stage Microcon™ X?

Microcon™ X air filter systems can be installed into any commercial or residential living space to provide 99.97% airborne particulate reduction without impacting the air conditioning flow, ventilation, static pressure or HVAC system sizing. Installation requires no costly electrical or mechanical alterations to the HVAC system and the unique design offers a knockout and power for optional installation of RGF's REME HALO® or HALO LED® active air purification systems.

In the presence of radioactive fallout, HEPA filtration is used to remove the hazardous airborne radioactive particles. HEPA filters were developed and proven to be the most effective means for removing radioactive particles as part of the Manhattan project in the 1940s. HEPA filters are still the primary filtration defense used in nuclear power plants and radio isotope manufacturing facilities to protect workers from exposure.

Second stage treatment involves the adsorption of radioactive gases using a proprietary sorbent material that is the current standard for gaseous radioisotope control at nuclear facilities. RGF's sorbent is a highly porous material with a large surface area, which makes it very effective at trapping and adsorbing various substances, including radioactive particles and contaminants.

1. The Behavior of Highly Radioactive Iodine on Charcoal; Lorenz, R., Martin, W; Nagao, H., 1974.
2. Retention of Iodine and Other Airborne Radionuclides in Nuclear Facilities During Abnormal and Accident Conditions, Final Report, International Atomic Energy Agency, 1983-1988.
3. Nuclear Air Cleaning Handbook; Oak Ridge National Laboratory; 1976.
4. Nuclear Air Cleaning Handbook; Oak Ridge National Laboratory; 2003.

## Microcon™ X Whole Home HEPA Air Filtration System



MODEL	COVERAGE*	AIRFLOW	HEPA	INTAKE/OUTFLOW	ELECTRICAL	SHIP WT.
MC-600-X (with MC-X installed)	Up to 2,700 ft <sup>2</sup> (1x ACH) 251 m <sup>2</sup>	360 cfm 611.6 m <sup>3</sup> /h	H13	8"	120V/225W	46 lbs 20.87
MC-600-X-230 (with MC-X installed)	Up to 2,700 ft <sup>2</sup> (1x ACH) 251 m <sup>2</sup>	360 cfm 611.6 m <sup>3</sup> /h	H13	8"	230V/225W	46 lbs 20.87

\* Based on one air change per hour

### REPLACEMENT FILTER KIT

Part# FL-HEPA-MCX  
(includes: 1 x Microcon X Filter,  
1 x HEPA Filter and 2x Pre-filter)

### DIMENSIONS

14.5"W x 27.5"H x 14.5"D  
368.3mm x 698.5mm x 368.3mm

### MOTOR/FAN

Designed for continuous operation  
Run tested for 50,000+ hours



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Approved for sale in California