

**Ultra Violet Air Purifiers** 

#### Using UV Technology To Purify Your Indoor Air

Your NuTone Dealer can install a Residential In-Duct UV

Air Purifier to purify the air throughout your home. NuTone UV Air Purifiers are designed to change the molecular structure of the contaminant through DNA Sterilization and UV Photo-Oxidation destroying both biological and chemical contaminants, including odors.

#### The NuTone In-Duct UV Air Purifiers Treat The Moving Air In Your Ductwork

The In-Duct UV Air Purifier is installed with the objective of treating the air, destroying bacteria,



After approximately 2 hours of operation, the NuTone purifier will have destroyed in excess of 80% (average) of the contaminants in the home.

viruses, mold, chemicals and odors such as bacteria, viruses, mold, mildew, smoke, formaldehyde,

> cleaning solvents, etc. There are only a few thousandths of a second to deliver the sufficient UV dosage needed to destroy the Bio-Chemical



contaminants in the air stream. This process can effectively and efficiently destroy the contaminants that travel throughout the ventilation system.

The NuTone In-Duct Air Purifier is designed to be on when the ventilation fan is on. As the air continually circulates through the ventilation system, the NuTone Air Purifier will continually bring the level of contamination down. With every pass more and more contaminants in the air are destroyed. In a typical application, with a home that has 4 air changes an hour, after 2 hours of operation, the NuTone Purifier will on average have treated in excess of 80% of all the contaminants in the air. The Purifiers will destroy the contaminants quicker than they will be introduced into the environment.

In-Duct models are designed to run 24 hours a day. That is not to say that they will. In-duct models have either a sensor or are hardwired to the home's ventilation system, which means the purifier, will only run when the fan is on. Besides the changing of the lamp, no other maintenance is required for a NuTone UV Air Purifier.

Using a good quality air filter, such as NuTone Electronic Air Cleaners or HEPA Filter System with the In-Duct UV Air Purifier, particulates, micro-organisms, chemicals and odors are all addressed, providing the ultimate in indoor air quality.

A NuTone UV Purifier is the most advanced purification system available - a purifier that destroys biological and chemical contaminants; is self-cleaning and maintenance-free, and comes with the most comprehensive warranty and longest effective Lamp life in the industry.

#### SIM SYSTEM

NuTone High Efficiency UV Air Purifiers incorporate the patented SIM System<sup>™</sup>. SIM is short for SLOW, INTENSIFY and MIX. Why is the SIM System<sup>™</sup> so important? NuTone uses a Turbulator to Slow moving air over the proprietary UV "J" Lamp. Contaminants spend a greater amount of time in contact with the UV "J" Lamp, which dramatically increases the purifiers kill. By Intensifying the UV Energy with the Aluminum Reflector, the UV Rays are concentrated into a lethal dose that will bombard and destroy the contaminants. Mixing takes place inside the Aluminum Reflector, ensuring that all the air comes in contact with the UV "J" Lamp. After the process, the purified air will Mix with the contaminated air, diluting the number of contaminants in the environment. By Slowing air over the "J" Lamp, Intensifying the UV Energy, and Mixing the air, NuTone Purifiers can greatly increase the Kill Rate. SIM Technology<sup>TM</sup> is based on the fundamental principles of UV Air Purification. Understanding UV and continuing innovations allows NuTone to set the standard in improving indoor air quality.

#### NuTone Smart Saber UV Object Purifier

The NuTone Smart Saber is a patent pending "Object" purifier, designed to bask Stationary Objects (i.e. A/C coil, duct walls) with UVC Germicidal Energy, preventing and destroying mold and other microbial contaminants.

Continually basking the coil with UVC Energy will prevent & destroy mold growth on the coil.



## **UV Object Purifier Features**

- Destroys mold & other biological contaminants on the "object" as well as biological odors
- High Intensity 16" UVC Quartz Lamp
- 3 Year Lamp operating live
- 3" LCD Display provides "Real Time" system status:
  - Electro-blue Back-light Display
  - Countdown Display
  - Lamp Out visual Alarm
  - Purifier Operational Animation
  - Visual Status Display
- 110 Volt
- Various Mounting Scenarios
- 1 Year Warranty including the UV Lamp
- CSA C/US Certified & CE Approved

## **UV Testing**

Tested by The Environmental Protection Agency (EPA) & The National Homeland Security Research Center (NHSRC) on Biological Warfare Agents (BWAs).

A SINGLE UV Bio-Wall 50 Commercial Air Purifier showed greater than 99.97% destruction on one pass on airborne bacteria, 99% on viral & 93% on spore.

Testing under task order 1112 of the contract between EPA and Battelle Memorial Institute for implementation of the Technology Testing and Evaluation Program (TTEP was established by the National Homeland Security Research Center with the U.S. Environmental Protection Agency's Office of Research & Development).

#### **NuTone 10-Year Warranty**

When installed and registered with a NuTone comfort system, NuTone residential UV Air Purifiers are warranted for 10 years on the unit, and 3 years on the lamp. Sold separately, the warranty becomes 3 years on the unit and lamp.

When installed and registered with a NuTone comfort system, NuTone Smart Saber UV Object Purifiers are warranted for 10 years on the unit. Sold separately, the warranty becomes 3 years on the unit. Ask your NuTone dealer or go to www.nutonehvac.com for warranty details.



## The Very Best for Your Family

We spend 90% of our time indoors most of it at home. We like to think the air within our home is clean, but surprisingly enough, it is not. Many of us use filters in our home ventilation systems in the hope of removing harmful particles from the air. Biological and chemical contaminants such as mold, bacteria, viruses, allergens, cooking and pet odors, cigarette smoke, and a host of other air-borne pollutants pass through even the highest-efficiency filters like sand through a tennis racket.

Environmental Protection Agency (EPA) studies of human exposure to air pollutants indicate that indoor levels of pollutants may be up to 100 times higher than outdoor levels and these contaminants continually circulate throughout the home.

With the billions of gallons of pollution pumped into the atmosphere every day, how is it we can still step outside and breathe in fresh air? The answer may surprise you: It is because of the....Sun.

The Sun's rays play a vital role in purifying the Earth's air. Ultraviolet Light irradiates the atmosphere, destroying biologicals (UV-C wavelength) and chemicals (UV-V wavelength). NuTone has successfully replicated this natural process and developed proprietary technology to purify the air you breathe at home.

Independent University studies concluded that the use of NuTone Ultraviolet Purification Systems drastically reduces respiratory symptoms resulting from poor indoor air quality. The studies showed a dramatic decline in concentrations of mold, microbes, endotoxins, infectious agents such as tuberculosis, and many other contaminants.



#### **Common Contaminants that UV Purifiers kill**

- Mold
- Viruses
- Fungus
- Spores
- Bacteria
- Chemicals
- Pet Dander
- Cooking Odors
- Biological Odors

- Cigarette Smoke
- Avian Flu (Bird Flu)
- Formaldehyde
- Diesel Fumes
- SARS
- VOCs
- Adhesives
- Dirty Sock Syndrome
- Sick Building Syndrome
- And Thousands More...

# NuTone

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