

# To preserve the health of you and your family, an Ultraviolet Germicidal Air Disinfection system from Lumalier has been installed in your home.



The air inside a climate-controlled home can become laden with mold, mildew, dander, bacteria and viruses.

The more airtight your home is (proper weather stripping, good insulation, quality storm windows), the worse the air quality can be.

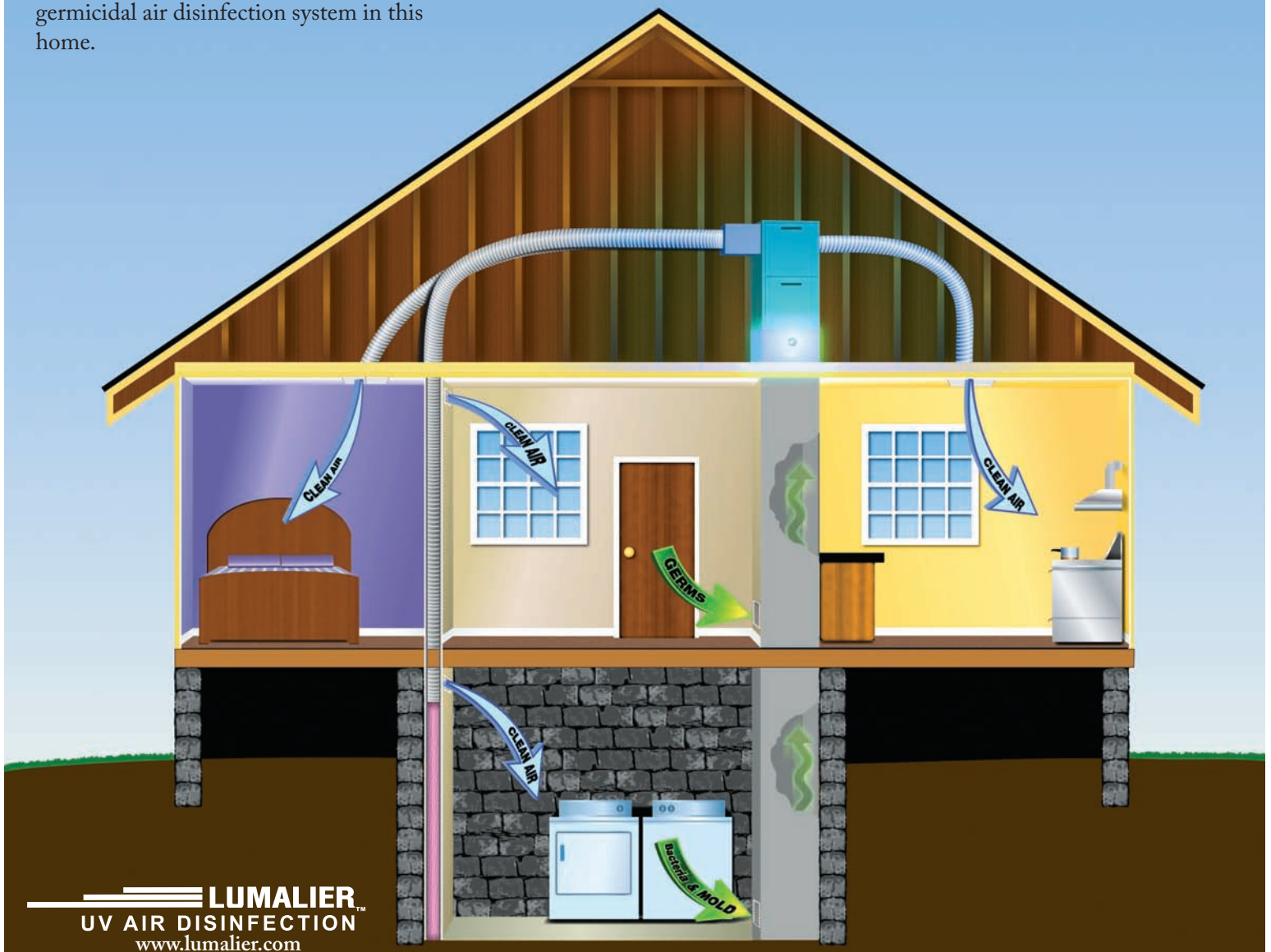
In fact, the air in a typical home is five times more polluted than outdoor air.

To address this growing problem, we have installed a hospital-proven, ultraviolet germicidal air disinfection system in this home.

## What is an ultraviolet germicidal air disinfection system?

The Three-Stage Indoor Air Quality (IAQ) System from Lumalier is an ultraviolet germicidal air disinfection system. At the heart of the Lumalier IAQ System are two Philips Germicidal Sterilamps®. These Sterilamps emit the UV-C component of ultraviolet light which destroys bacteria, mold, viruses and other biological contaminants in the air, in liquids or on surfaces.

This technology has been used in hospitals, government buildings, schools, day cares and office buildings. Recent improvements in the technology have made it affordable for residential use. Flip the page to learn more about the proven technology behind the Lumalier Indoor Air Quality System.



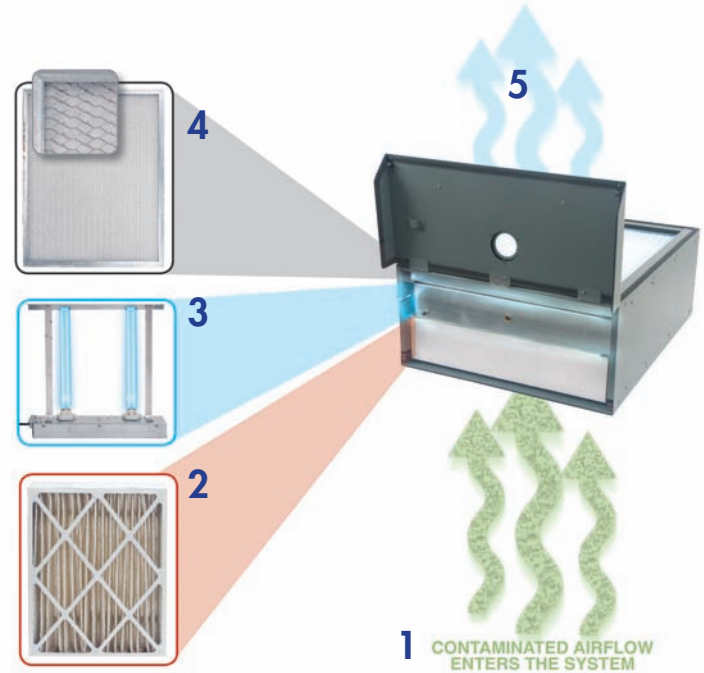
# To preserve the health of you and your family, a Three-Stage Indoor Air Quality System from Lumalier has been installed in your home.



## Here is how the system works:

Each time the air recycles in the A/C system, it is disinfected by the Lumalier Indoor Air Quality System. The average home recycles all of its air through the A/C system in about 15 minutes.

1. Polluted air enters the return air supply vents of a home. It then passes through the Lumalier Indoor Air Quality System.
2. A 5" MERV 11 filter blocks large airborne contaminants. Dust, mold spores, pet dander and a host of other allergens are removed from the air.
3. Small contaminants, like viruses and bacteria, are disinfected by two Philips Ultraviolet Germicidal Sterilamps®.
4. Air passes through a PCO (photocatalytic oxidation) felt to remove volatile organic compounds, including tobacco smoke, chemical fumes and most common household odors.
5. Healthy, safe, clean air is passed into the A/C or furnace unit and distributed throughout the home with absolute silence and safety.



## How does ultraviolet light clean the air?

Ultraviolet germicidal air disinfection systems utilize the UV-C component of ultraviolet light to disinfect the air. Ultraviolet rays in the UV-C wavelength will destroy pathogens such as viruses, bacteria, mold and mildew.

The UV-C rays break through the outer membrane of microbes like yeast, mold, bacteria, viruses or algae. When the radiation reaches the DNA of the microbe, it causes the DNA strand to break. The microbe loses its ability to reproduce and is rendered harmless.

Ultraviolet germicidal lamps provide a much more powerful and concentrated effect of ultraviolet energy than can be found naturally. Such lamps sanitize air that is passed directly in their path to destroy pathogens that come in contact with the UV rays.

Musty, moldy type odors can be eradicated, along with tuberculosis, cold and flu viruses, smallpox and other airborne diseases. This system is particularly beneficial to those suffering from allergies. Common allergens are molds, mildews and fungi. These microbes would be destroyed, improving the health of the allergy sufferer.

Ultraviolet germicidal irradiation has been studied since the 1930's and has been used to destroy the same microbes that cause indoor air pollution. For many years, the medical industry has used ultraviolet light to sanitize rooms and equipment.