

AiroCide™ Air Quality-Improvement™ Systems

AiroCide is a unique airborne pathogen killing technology that uses a patented combination of ultraviolet light and a proprietary titanium based photocatalyst. The *AiroCide* technology and developing product line is clinically proven and field tested to kill/remove/eliminate airborne pathogenic and non-pathogenic microorganisms in vegetative and spore states (bacteria, mold & fungi, viruses and dust mites), allergens, odors and harmful volatile organic compounds (VOC's) in Medical/Healthcare, Child Care, Consumer Household, Mold Remediation, Athletic and Sports Facilities, Corrections Facilities and Food Preservation applications.

Summary:

A clinical study was conducted to determine the initial and sustained reduction of airborne mold and bacteria in two residences of similar size, design and structure.

Airborne mold was reduced in the homes by an average of 60% in 24 hours and even further to an average of 87% in 6 months. Bacteria in the air inside the homes was reduced an average of 57% in 24 hours and maintained a level of 49% lower than baseline in 6 months.

Facility

The two three-level residences were 67,000 ft³ (Residence A) and 70,000 ft³ (Residence B) and made of brick. Two adults and two children were living in each home at the time of the tests. The children and one adult living in Residence A reported suffering from asthma and allergies.

Protocol

The test period consisted of three (3) individual days of air sampling that spanned a 3-month time frame. A baseline reading, with no *AiroCide* systems operating, was conducted at each residence for comparison to all other test days. Air samples were taken the next day after the *AiroCide* systems were operating for 24 hours. Air samples were then taken six (6) months after baseline to measure the sustained effect of the *AiroCide* systems. The *AiroCide* systems continued to operate 24/7 during this timeframe.

Results:

Airborne mold was reduced in the homes by an average of 60% in 24 hours and even further to an average of 87% in 6 months. Bacteria in the air inside the homes was reduced an average of 57% in 24 hours and maintained a level of 49% lower than baseline in 6 months.

After six months of *AiroCide* use one of the adults in Residence A reported: “ First, I was able to discontinue using two of my asthma medications and have maintained very well without them...Second, only one of my children has been seen by her pediatrician this entire winter season. She was diagnosed with bronchitis and the bacterial virus never spread from one child to another (in our house).”

Copies of tests mentioned in this paper can be obtained by writing KesAir, Research & Development, 3625 Kennesaw N. Ind. Pkwy., Kennesaw, GA 30144.

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