

# The Trusted Authority for Private and Group Residential

## **Residential Benefits:**

- Inactivate environmental pathogens to reduce your family's infection rates and illnesses
- Reduce odors and poor air quality within your home
- Reduce energy consumption by AHUs and eliminate chemical coil cleaning

## What are four causes of poor indoor air in your home?

#### Old and new construction methods

Modern, energy efficient buildings are designed and built to be airtight, creating an ideal indoor incubator for the growth of germs and mold colonies. Older, 'drafty' homes have unfiltered air that leaks in from dusty attics, sooty fireplaces, bathroom fans vents, stove fan vents, dryer vents, and poorly insulated or ill-fitting doors and windows.

### Increased use of synthetic materials

The ever-increasing use of synthetic materials in buildings, furniture, carpets, and cleaning supplies provides an ongoing source of airborne volatile organic chemicals (VOCs).

### Poor design of our homes and HVAC

Poor design and/or construction of heating, ventilation, and air conditioning (HVAC) systems prevents proper air exchanges and poor circulation of conditioned air.

## Personal activities and habits

Occupant activities like cooking, cleaning, and laundry; poor maintenance habits (i.e. forgetting to replace filters or procrastination in repairs); and contributing factors such as smoking, burning candles, and use of air 'fresheners'.

## **UVC Solutions**

Types of disinfection incorporating UVC energy include:

- In-AHU and In-Duct disinfection
- Upper-room/upper-air UVGI
- Surface/room decontamination

## Challenges: Private and Group Residential

Poor indoor air quality (IAQ) due to:

- Airborne particulates (mostly dust)
- Airborne biological microbes (germs, virus, bacteria, fungus)
- Airborne chemicals and gasses (volatile organic compounds (VOCs).





www.lumalier.com 1931 Thomas Road Memphis TN 38134 901-800-1709 or 1-888-610-1709

# **UVC Disinfection Products for Residential Facilities**

# UVC for IAQ and Energy Efficiency In AHU and In Duct UV Fixtures

In-AHU and In-Duct fixtures, such as the ADPL or PRU Series UVC Fixtures, are installed inside ventilation systems to provide high-level disinfection of the airborne infectious pathogens that can cause respiratory sickness, disease, and infection in homes and residential facilities. In-AHU and In-Duct fixtures are scalable to fit any size air handler unit (AHU).

I TILLE

- Achieves the greatest square foot coverage at the lowest cost.
- Uses the existing ventilation system to disinfect and distribute air.
- Eliminates biological growth on coils and in the drain pan that can cause coil fouling, odors, and premature failure of air conditioning equipment.
- Provides your home with an ROI benefit with reduced energy consumption and maintenance.

# UVC for IAQ Upper-Air UV Fixtures

Upper-air UV fixtures are engineered to provide very targeted airborne pathogen reduction in high-risk areas in group residential facilities.

- Installation applications include lobbies in administrative buildings, hallways, common and gathering areas, gyms, cafeterias, libraries, etc.
- Units are available for high or low ceilings and for any square footage.
- Units can be permanently or temporarily installed for flexible space uses.
- Natural convection-currents create repeated air disinfection within defined spaces. Fan assisted models are available.

## UVC for Risk Management Surface Disinfection

Surface disinfection UV fixtures are engineered for high-level disinfection of contaminated surfaces that can spread infection in group residential facilities.

- Portable units are ideal for temporary disinfection of floors, desks, and table surfaces after any "resident discharge event" (blood, vomit, diarrhea, etc.).
- Ideal for group activity and common areas where contaminated surfaces can spread sickness.
- Recommended for treatment of difficult-to-disinfect surfaces.
- Surface disinfection units are available in both fixed and portable options.

January 2021

©2021 Lumalier. All Rights Reserved.



www.lumalier.com 1931 Thomas Road Memphis TN 38134 901-800-1709 or 1-888-610-1709