

Why UV light?

For over a century, scientists have known that certain frequencies of light have a deadly effect on microbial life. Exposure to ultraviolet light in the range of 254 NM (UV-C band) disrupts the DNA of micro-organisms preventing them from reproducing, effectively killing them.

How does UV kill germs?

UV-C light produced by the Fresh-Aire UV System penetrates the cell walls of micro-organisms causing cellular damage, which kills them by preventing them from reproducing. In nature this frequency of light is filtered out by the Earth's atmosphere, so microbes have no defense against it. Fresh-Aire UV systems are tested and validated against bacteria, viruses, mold & fungus. Fresh-Aire UV systems have been tested and achieve up to a *99.999% reduction on microorganisms.

Will UV light kill COVID-19 (coronavirus)?

While Fresh-Aire UV systems have not been specifically tested against COVID-19 (coronavirus), they have been tested and proven effective against similar pathogens that require a greater UV dosage to be inactivated (killed) than coronavirus. www.freshaireuv.com/coronavirus-update/

How does UV light work against micro-organisms?

UV-C light produced by the Fresh-Aire UV System penetrates the cell walls of micro-organisms causing cellular damage, which kills them by preventing them from reproducing. In scientific studies UV light has been proven to kill 90% of microbial contaminants after 10 minutes of exposure and 99% after 1 hour.

How does it work?

The technology is based on a process called photocatalytic oxidation (like the catalytic converter on cars). Germicidal UV-C light reacts with titanium dioxide infused carbon cells; this neutralizes contaminants, leaving only harmless water vapor and CO2. This process leaves the carbon cells clean so they never fill up or need to be replaced. The result is clean air throughout the home.

Where is the UV product installed?

Fresh-Aire UV-C Systems are installed in the HVAC unit and/or ductwork and disinfect interior surfaces and the air as it circulates through the ventilation system.

Can the UV light be transferred to a new HVAC system?

Yes, most Fresh-Aire UV systems can be moved to a new air system.

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What type of power supply is required?

18-32 VAC, 60 Hz, 0.68 Amps, 16 VA. Fresh-Aire UV power supply technologies utilize a high frequency electronic ballast design for stable lamp operation and increased lamp life. The power supply is completely water-resistant and can be mounted directly within the air handler for tight installations.

Should the UV light be on 24 hours a day?

Yes. These products are intended to be on 24 hours a day. Mold growth doesn't stop when the blower is off and turning the UV light on and off would shorten life of the UV lamp. Running the air system in "fan" mode will cycle air through the home without turning on the AC or heater. Many programmable thermostats have a this setting.

Are the UV light lamps waterproof?

Yes. Fresh-Aire UV lamps are the only water-resistant lamps on the market with water resistant connectors for mounting in "wet" locations such as at the coil and drain pan. Lamps incorporate a shielded design that provides longer lamp life in cold areas.

What about the filter on the HVAC system?

Conventional filtration is effective against particulates, like dust, but has no effect on VOCs and biological contaminants inside the air system and throughout the home. UV disinfection systems are a needed addition to standard HVAC unit filtration.

Can UV light damage materials inside the HVAC system?

No. UV lamps offer the ideal balance of germicidal effectiveness without damaging UV sensitive materials inside the air system.

Can you touch the lamps?

The lamps can be handled only when not lit. Never look directly at, touch, or expose skin close to the UV-C light. Unlike most other manufacturer's lamps Fresh-Aire UV lamps can be handled when not lit.

Is it OK to look at UV light?

No. Never look at the UV light when it is lit. UV-C light can give your eyes a painful "sunburn." Unplug or disconnect the unit to work on it. Don't look at the light while wearing sunglasses.

Is UV light safe for children and pets?

Yes. When a UV light system is installed in a central air system the germ-killing effect takes place inside the air system and is limited to that area. There is no danger to any living thing in the home except microbes that are carried by the air into the central air system.

Does the UV system produce ozone?

No. Fresh-Aire UV products produce no ozone, in fact it removes ozone from the air.

Has UV light been tested?

Fresh-Aire UV has been proven safe and effective in numerous laboratory tests. It has been validated as ozone-free by UL Labs, certified by CARB, ETL & CE, and has won the prestigious AHR Innovation Award for indoor air quality.